

## Supplementary Information

### **A peptide N-terminal protection strategy for comprehensive glycoproteome analysis using hydrazide chemistry based method**

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Supplementary Information contains:

Supplementary Figures S1-S9

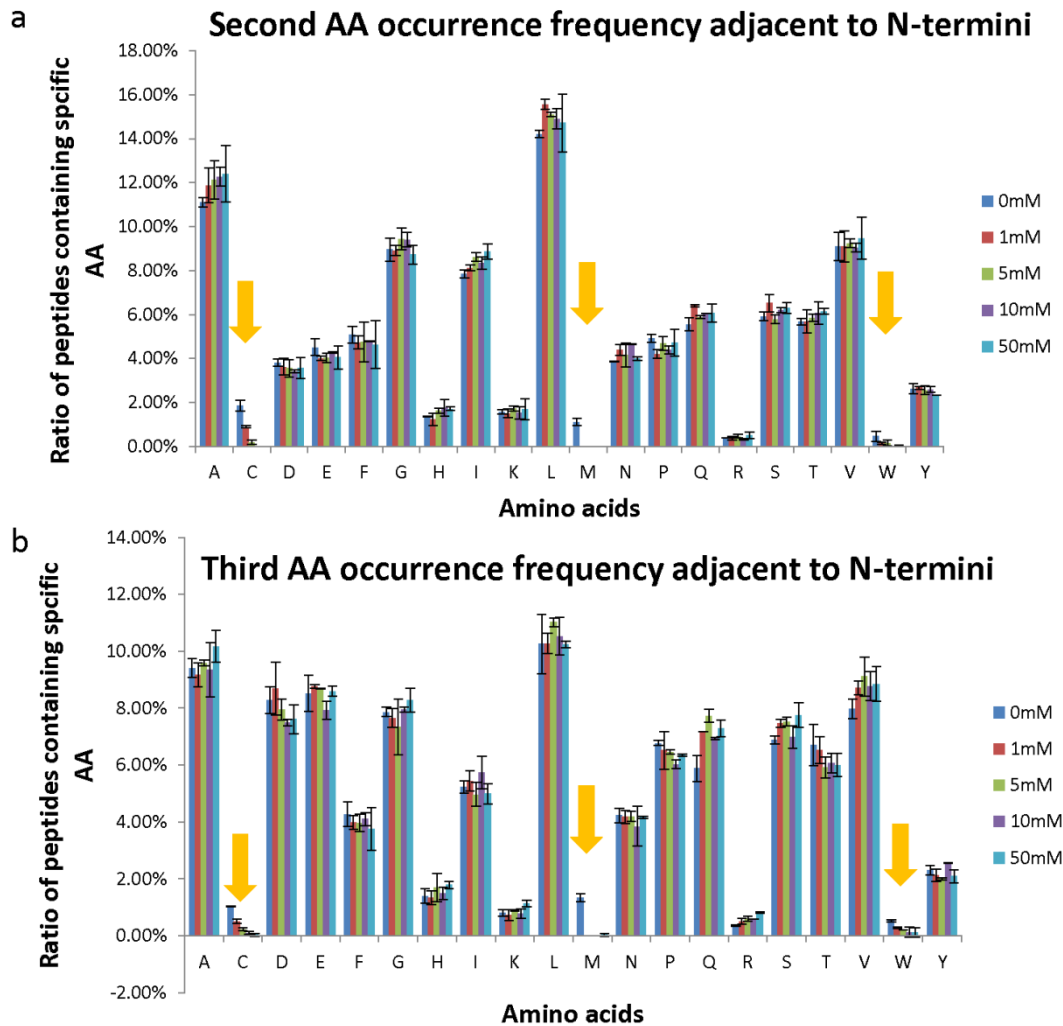
**Note: Table S1/ The percentages of peptides containing each amino acid residue overall.**

**Table S2/ The percentages of peptides containing each amino acid residue at C-terminus.**

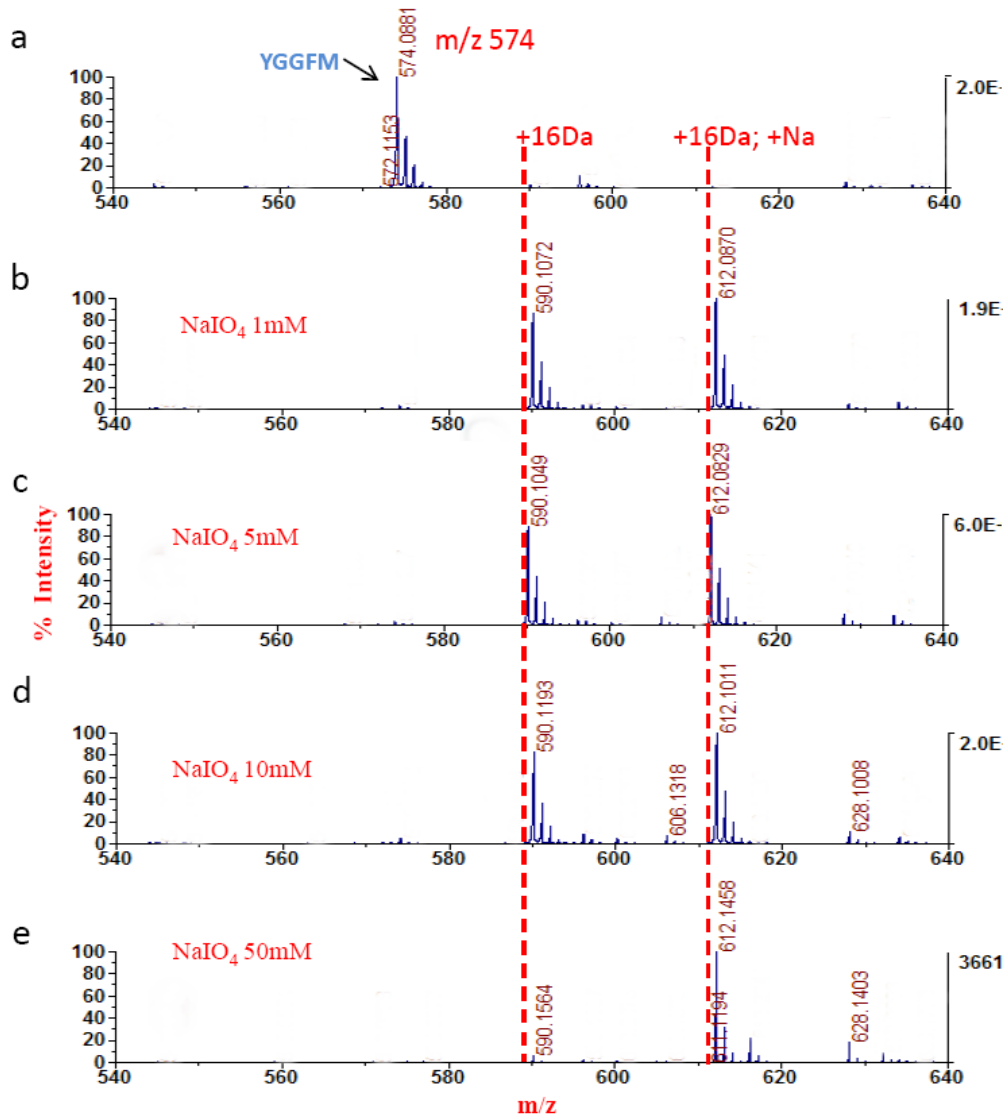
**Table S3/ The percentages of peptides containing each amino acid residue at N-terminus.**

**Table S4 / The glycosites and glycoproteins identified in large scale studies using the conventional and improved HC method.**

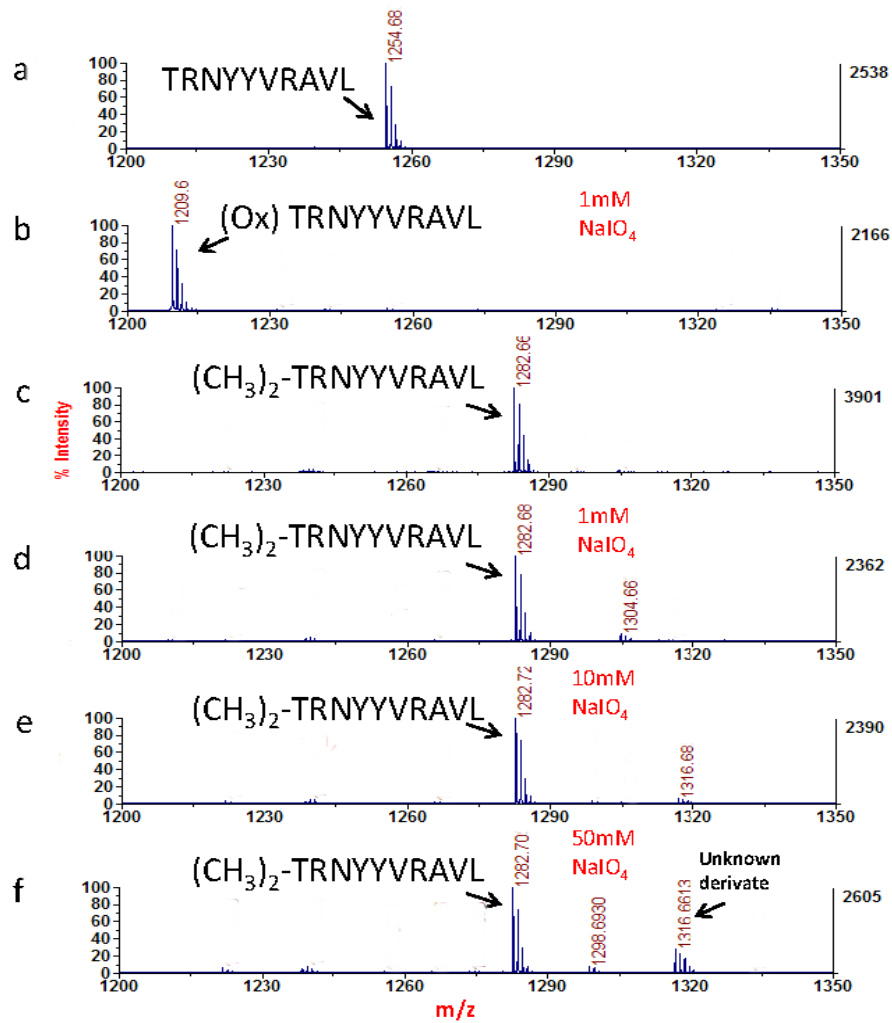
**Table S5 / The de-glycopeptides identified in large-scale studies using the conventional and improved HC method.**



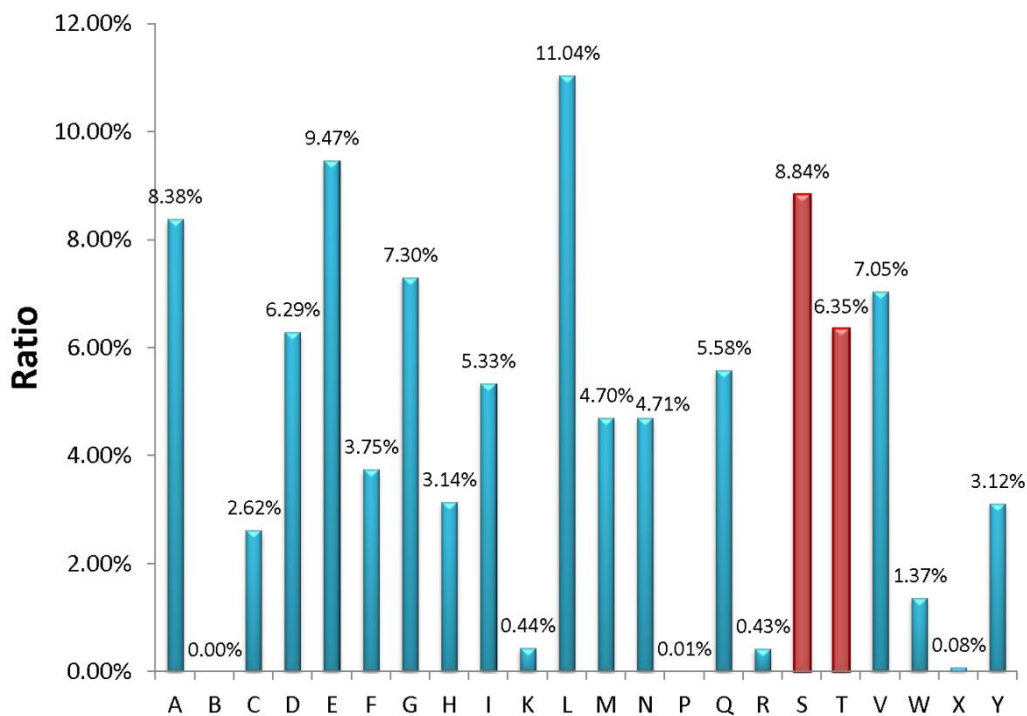
**Figure S1 |Proteome-wide amino acid frequency check approach to locate the possible side reaction sites. (a)** The percentage of peptides with the second residue from the N-termini with a specific type of amino acid residue in all peptides. **(b)** The percentage of peptides with the third residue from the N-termini with a specific type of amino acid residue in all peptides. Above data were averaged from 4 replicate experiments (error bars represent the standard deviation )



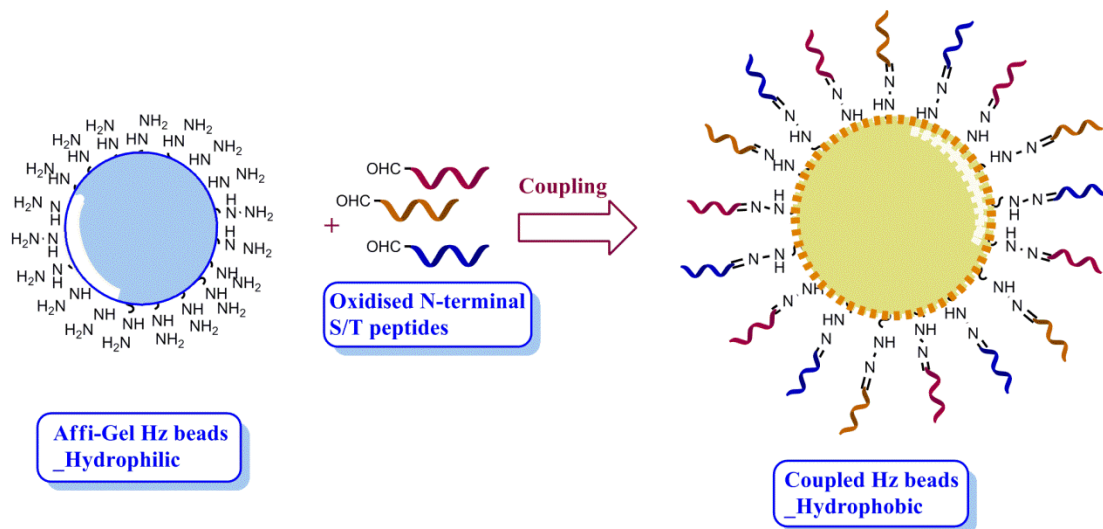
**Figure S2 | The side reactions on Met.** (a-e) MALDI mass spectra of the Met containing peptides YGGFM (0.01  $\mu\text{g}/\mu\text{L}$ , 0.5  $\mu\text{L}$ ) oxidized at 0, 1, 5, 10, 50 mM  $\text{NaIO}_4$ .



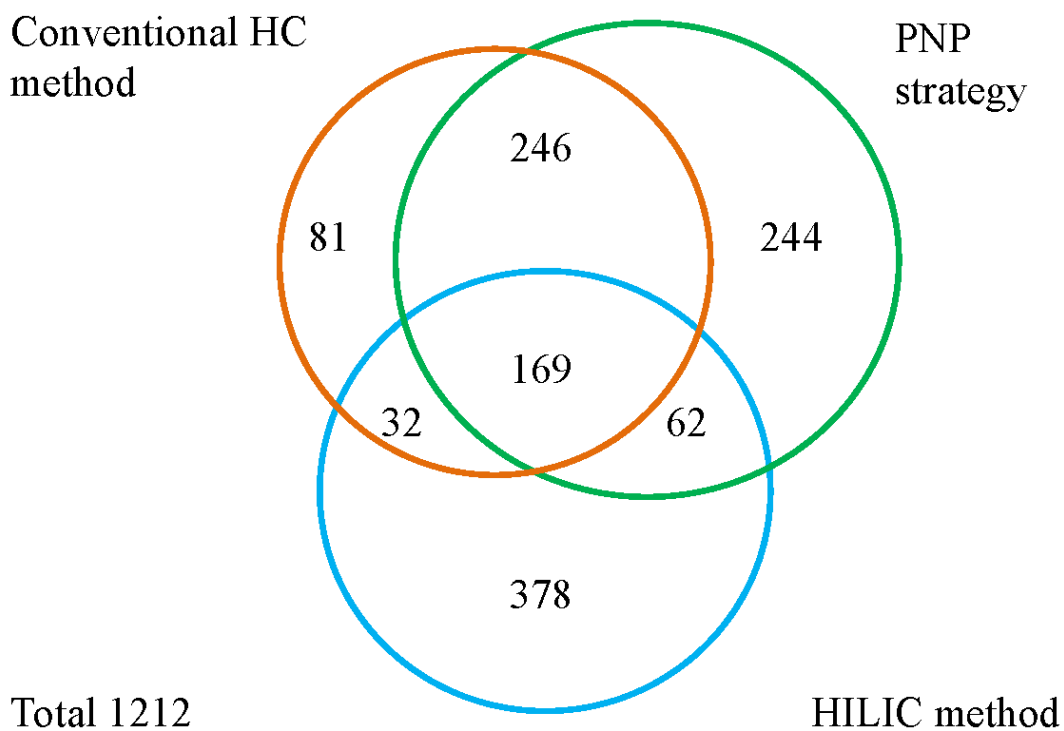
**Figure S3 | PNP strategy prevents the oxidation of peptides with N-terminal Thr.** MALDI mass spectra of the standard N-terminal Thr peptide TRNYYVRAVL (0.01 $\mu\text{g}/\mu\text{L}$ , 0.5 $\mu\text{L}$ ) with or without dimethyl protection oxidized in periodate solutions with different concentrations: (a) without protection, without oxidation; (b) without protection, with oxidation (1mM  $\text{NaIO}_4$ ); (c) with protection, without oxidation; (d) with protection, with oxidation (1mM  $\text{NaIO}_4$ ); (e) with protection, with oxidation (10mM  $\text{NaIO}_4$ ); (f) with protection, with oxidation (50mM  $\text{NaIO}_4$ ).



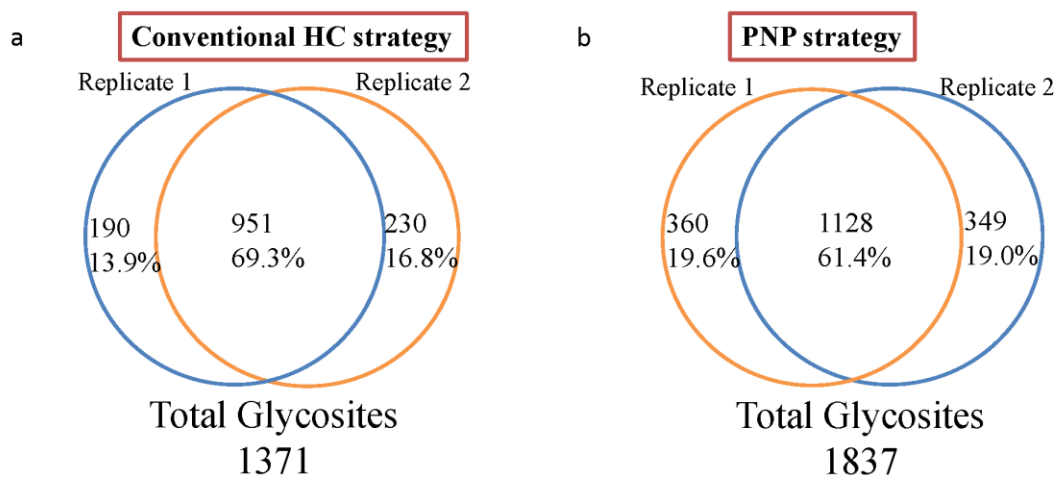
**Figure S4 | The N-terminal amino acid residue distribution of in silico tryptic peptides of mouse proteome (database: IPI mouse v3.87).**



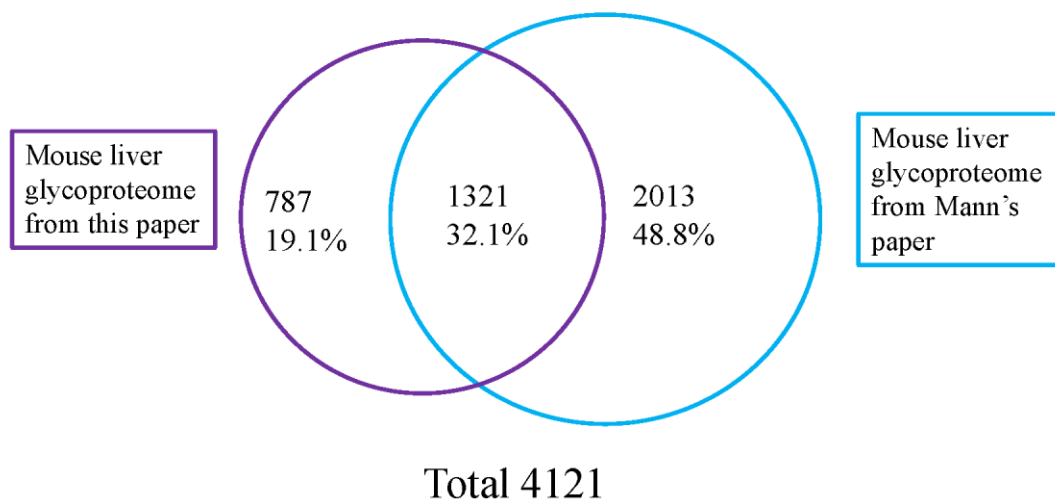
**Figure S5 | Surface property change of hydrazide beads during glycopeptide enrichment in the conventional HC method.** Enormous peptides with N-terminal Seri/Thr are also coupled onto the hydrazide beads in the conventional HC method because they are also oxidized. This makes the surface of the beads changing from hydrophilic to hydrophobic, from neutral to charged. While in the PNP strategy, the bead surface will not change significantly because these peptides will not be bound.



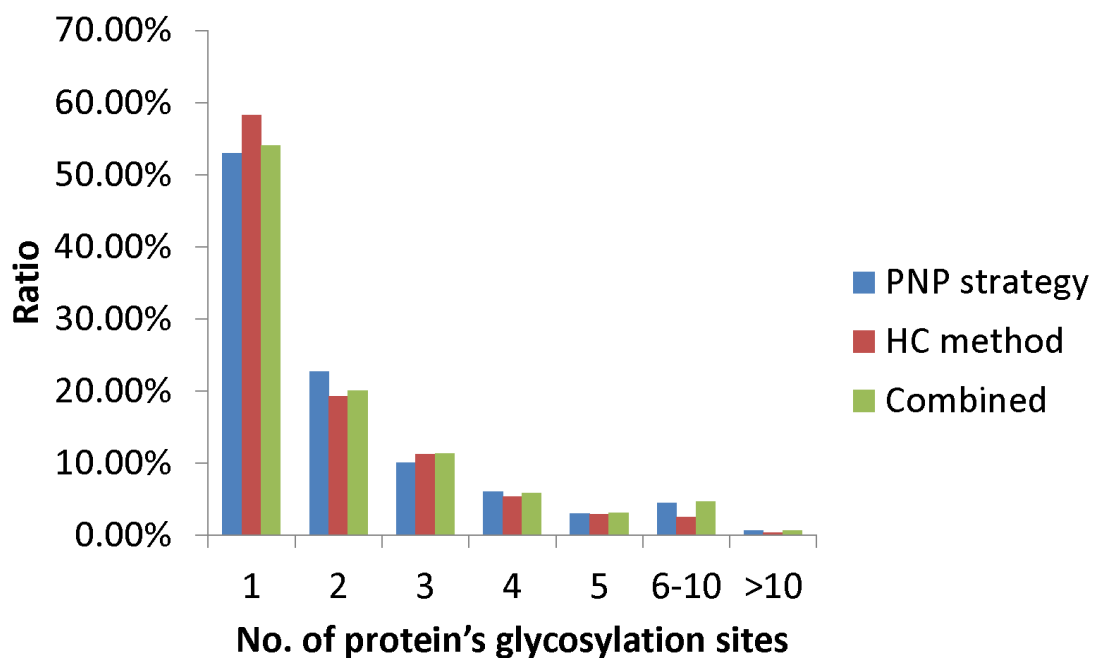
**Figure S6 | Performance of the PNP strategy.** Comparison of the overlaps of glycosites identifications for conventional HC method, PNP strategy and the HILIC method.



**Figure S7 | Comparison of replicate runs.** (a) Conventional HC method. (b) PNP strategy.



**Figure S8 | Comparison of large scale mouse liver glycoproteome dataset acquired in this paper with the dataset acquired from lectin affinity methods reported in literature.** Overlap of the glycosites identified in this work and in the work by using lectin affinity methods<sup>1</sup>.



**Figure S9 | Distribution of singly and multiply glycosylated proteins.** The ratio of identified proteins with multi-glycosites in PNP strategy is higher than the conventional HC method.

1. Zielinska, D.F., Gnad, F., Wisniewski, J.R. & Mann, M. Precision Mapping of an In Vivo N-Glycoproteome Reveals Rigid Topological and Sequence Constraints. *Cell* **141**, 897-907

(2010).



Table S1| The percentages of peptides containing each amino acid residue overall

	NaIO <sub>4</sub>	0mM_1	0mM_2	0mM_3	0mM_4	1mM_1	1mM_2	1mM_3	1mM_4	5mM_1	5mM_2	5mM_3	5mM_4	10mM_1	10mM_2	10mM_3	10mM_4	50mM_1	50mM_2	50mM_3	50mM_4
A	69.35%	69.21%	70.55%	71.93%	70.39%	71.30%	70.74%	71.35%	70.60%	69.56%	71.56%	68.98%	68.50%	69.11%	69.99%	70.58%	67.80%	68.87%	69.31%	69.53%	
R	45.46%	44.47%	44.59%	42.73%	45.13%	44.84%	44.33%	44.03%	45.72%	46.81%	44.72%	44.55%	47.77%	44.35%	45.72%	45.42%	47.03%	47.50%	48.71%	49.52%	
N	46.18%	43.74%	45.27%	44.34%	46.25%	45.27%	46.31%	45.76%	44.17%	46.61%	46.93%	42.53%	43.53%	45.55%	46.26%	46.13%	44.47%	42.34%	44.47%	45.57%	
D	62.95%	59.42%	62.81%	60.34%	59.80%	60.67%	59.45%	59.97%	60.28%	60.62%	62.11%	57.56%	58.97%	57.97%	62.50%	59.64%	60.20%	58.06%	61.65%	60.74%	
<b>C</b>	<b>17.28%</b>	<b>16.03%</b>	<b>15.78%</b>	<b>16.92%</b>	<b>10.53%</b>	<b>10.82%</b>	<b>10.12%</b>	<b>10.36%</b>	<b>4.18%</b>	<b>4.27%</b>	<b>3.82%</b>	<b>3.87%</b>	<b>1.60%</b>	<b>1.57%</b>	<b>1.87%</b>	<b>1.78%</b>	<b>0.38%</b>	<b>0.08%</b>	<b>0.58%</b>	<b>0.70%</b>	
Q	51.15%	50.83%	50.66%	50.05%	52.37%	51.82%	50.61%	50.63%	51.79%	51.48%	53.17%	50.26%	50.35%	50.34%	51.87%	50.04%	50.71%	48.47%	50.64%	52.20%	
E	66.55%	64.86%	66.73%	65.46%	67.89%	67.04%	67.25%	67.19%	65.95%	67.26%	67.34%	65.20%	66.76%	66.64%	68.72%	70.84%	65.09%	63.87%	67.05%	67.24%	
G	65.20%	63.35%	63.16%	66.27%	65.20%	65.92%	65.15%	66.48%	64.26%	64.50%	69.45%	65.73%	64.81%	66.42%	63.70%	64.44%	64.18%	64.68%	64.35%	64.56%	
H	21.56%	21.58%	23.27%	18.37%	20.46%	19.11%	19.60%	20.64%	21.31%	24.06%	21.31%	22.76%	23.92%	20.34%	23.26%	21.60%	28.44%	21.29%	25.80%	25.24%	
I	59.89%	56.42%	58.06%	59.48%	59.47%	59.55%	59.86%	60.60%	58.87%	60.36%	62.71%	58.79%	60.15%	58.71%	60.63%	61.42%	60.80%	57.18%	59.78%	60.93%	
L	67.78%	79.31%	79.32%	79.74%	82.37%	82.00%	81.91%	82.34%	81.59%	83.17%	87.94%	80.32%	82.27%	81.60%	83.22%	82.13%	82.39%	79.03%	83.20%	83.75%	
K	64.26%	64.39%	65.95%	65.68%	64.21%	64.25%	64.86%	65.38%	64.33%	64.76%	64.62%	65.91%	63.28%	64.40%	65.37%	65.60%	66.14%	62.98%	64.35%	64.18%	
<b>M</b>	<b>16.00%</b>	<b>12.60%</b>	<b>12.40%</b>	<b>11.64%</b>	<b>0.26%</b>	<b>0.25%</b>	<b>0.35%</b>	<b>0.24%</b>	<b>0.27%</b>	<b>0.39%</b>	<b>0.20%</b>	<b>0.44%</b>	<b>0.21%</b>	<b>0.22%</b>	<b>0.27%</b>	<b>0.53%</b>	<b>0.23%</b>	<b>0.32%</b>	<b>0.19%</b>	<b>0.19%</b>	
F	46.60%	41.12%	41.94%	40.79%	42.17%	41.13%	42.23%	41.99%	41.67%	42.67%	48.14%	41.56%	45.69%	41.74%	45.39%	45.16%	44.47%	38.79%	45.17%	46.21%	
P	62.56%	59.88%	59.58%	61.80%	58.95%	60.11%	61.20%	60.91%	58.53%	59.76%	62.01%	57.73%	57.79%	57.89%	59.02%	59.47%	59.52%	56.61%	58.62%	61.19%	
S	62.10%	59.81%	60.02%	60.02%	57.96%	58.69%	58.46%	60.36%	58.46%	56.80%	62.91%	57.64%	57.79%	56.62%	58.02%	59.29%	58.47%	55.40%	56.69%	58.00%	
T	59.97%	59.23%	61.54%	60.56%	56.51%	57.95%	55.21%	58.01%	56.04%	55.03%	59.60%	55.62%	55.63%	57.07%	57.09%	57.07%	54.85%	54.76%	54.57%	55.83%	
<b>W</b>	<b>8.62%</b>	<b>7.90%</b>	<b>7.74%</b>	<b>7.38%</b>	<b>6.45%</b>	<b>5.57%</b>	<b>5.35%</b>	<b>4.95%</b>	<b>5.33%</b>	<b>5.00%</b>	<b>5.03%</b>	<b>4.31%</b>	<b>3.96%</b>	<b>2.47%</b>	<b>3.81%</b>	<b>3.02%</b>	<b>3.91%</b>	<b>2.02%</b>	<b>3.80%</b>	<b>3.57%</b>	
Y	32.34%	29.94%	29.25%	29.42%	30.20%	30.18%	30.60%	29.83%	29.40%	29.39%	31.96%	28.65%	29.97%	30.67%	30.82%	30.67%	29.65%	25.73%	29.67%	30.34%	
V	69.48%	75.72%	70.06%	71.77%	72.76%	69.88%	71.03%	71.59%	71.27%	71.66%	72.16%	70.47%	70.17%	69.78%	72.26%	71.64%	69.45%	70.73%	69.82%	69.34%	

These data was based on the peptide identifications from the mouse tryptic peptide samples treated with different NaIO<sub>4</sub> concentration.

Table S2| The percentages of peptides containing each amino acid residue at the C-terminus

	NaIO4	0mM_1	0mM_2	0mM_3	0mM_4	1mM_1	1mM_2	1mM_3	1mM_4	5mM_1	5mM_2	5mM_3	5mM_4	10mM_1	10mM_2	10mM_3	10mM_4	50mM_1	50mM_2	50mM_3	50mM_4
A	0.04%	0.12%	0.05%	0.05%	0.00%	0.06%	0.06%	0.08%	0.07%	0.07%	0.00%	0.09%	0.00%	0.22%	0.07%	0.09%	0.00%	0.00%	0.00%	0.00%	0.06%
C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
D	0.00%	0.00%	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%
E	0.08%	0.08%	0.20%	0.11%	0.00%	0.00%	0.06%	0.08%	0.07%	0.13%	0.10%	0.09%	0.21%	0.15%	0.07%	0.09%	0.15%	0.08%	0.08%	0.06%	0.06%
F	0.04%	0.04%	0.05%	0.05%	0.00%	0.06%	0.06%	0.08%	0.07%	0.07%	0.00%	0.09%	0.14%	0.15%	0.07%	0.00%	0.00%	0.08%	0.13%	0.06%	
G	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
H	0.04%	0.15%	0.10%	0.00%	0.13%	0.12%	0.12%	0.16%	0.07%	0.13%	0.20%	0.09%	0.07%	0.07%	0.13%	0.00%	0.08%	0.08%	0.13%	0.13%	
I	0.08%	0.12%	0.10%	0.00%	0.13%	0.06%	0.12%	0.08%	0.07%	0.20%	0.20%	0.09%	0.14%	0.07%	0.13%	0.09%	0.15%	0.08%	0.13%	0.06%	
<b>K</b>	<b>56.83%</b>	<b>57.65%</b>	<b>58.16%</b>	<b>58.94%</b>	<b>57.24%</b>	<b>57.14%</b>	<b>57.59%</b>	<b>57.54%</b>	<b>56.51%</b>	<b>55.42%</b>	<b>56.38%</b>	<b>56.59%</b>	<b>53.96%</b>	<b>56.69%</b>	<b>56.62%</b>	<b>56.00%</b>	<b>55.61%</b>	<b>55.24%</b>	<b>54.38%</b>	<b>53.35%</b>	
L	0.25%	0.12%	0.20%	0.38%	0.26%	0.43%	0.35%	0.47%	0.34%	0.39%	0.50%	0.44%	0.35%	0.37%	0.13%	0.53%	0.45%	0.16%	0.32%	0.38%	
M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
N	0.08%	0.04%	0.05%	0.11%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
P	0.00%	0.08%	0.05%	0.11%	0.13%	0.12%	0.12%	0.16%	0.13%	0.13%	0.20%	0.18%	0.14%	0.15%	0.13%	0.18%	0.08%	0.00%	0.13%	0.13%	
Q	0.08%	0.12%	0.05%	0.16%	0.20%	0.06%	0.06%	0.16%	0.20%	0.20%	0.20%	0.00%	0.07%	0.15%	0.07%	0.00%	0.08%	0.08%	0.13%	0.13%	
<b>R</b>	<b>42.19%</b>	<b>41.23%</b>	<b>40.72%</b>	<b>39.66%</b>	<b>41.64%</b>	<b>41.62%</b>	<b>41.19%</b>	<b>40.89%</b>	<b>42.21%</b>	<b>43.13%</b>	<b>41.91%</b>	<b>41.83%</b>	<b>44.44%</b>	<b>41.59%</b>	<b>42.25%</b>	<b>42.67%</b>	<b>43.04%</b>	<b>43.87%</b>	<b>44.27%</b>	<b>45.19%</b>	
S	0.08%	0.12%	0.10%	0.16%	0.13%	0.12%	0.17%	0.16%	0.13%	0.00%	0.00%	0.26%	0.21%	0.22%	0.13%	0.27%	0.15%	0.08%	0.13%	0.19%	
T	0.00%	0.04%	0.05%	0.05%	0.07%	0.00%	0.00%	0.08%	0.00%	0.00%	0.10%	0.09%	0.07%	0.07%	0.00%	0.00%	0.08%	0.16%	0.00%	0.06%	
V	0.08%	0.08%	0.05%	0.11%	0.07%	0.06%	0.06%	0.08%	0.13%	0.13%	0.10%	0.09%	0.07%	0.07%	0.07%	0.09%	0.08%	0.08%	0.06%	0.13%	
W	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Y	0.08%	0.04%	0.05%	0.05%	0.00%	0.06%	0.06%	0.00%	0.00%	0.00%	0.00%	0.09%	0.14%	0.00%	0.13%	0.00%	0.08%	0.00%	0.06%	0.06%	

These data was based on the peptide identifications from the mouse tryptic peptide samples treated with different NaIO4 concentration.

Table S3| The percentages of peptides containing each amino acid residue at the N-terminus

	NaIO <sub>4</sub>	0mM_1	0mM_2	0mM_3	0mM_4	1mM_1	1mM_2	1mM_3	1mM_4	5mM_1	5mM_2	5mM_3	5mM_4	10mM_1	10mM_2	10mM_3	10mM_4	50mM_1	50mM_2	50mM_3	50mM_4
A	12.31%	12.41%	13.52%	13.95%	14.74%	15.28%	15.36%	16.64%	15.85%	15.91%	15.38%	15.99%	14.95%	15.78%	14.97%	14.49%	15.05%	16.53%	15.70%	14.53%	
<b>C</b>	<b>0.34%</b>	<b>0.35%</b>	<b>0.34%</b>	<b>0.32%</b>	<b>0.07%</b>	<b>0.12%</b>	<b>0.12%</b>	<b>0.24%</b>	<b>0.13%</b>	<b>0.07%</b>	<b>0.10%</b>	<b>0.09%</b>	<b>0.07%</b>	<b>0.00%</b>	<b>0.07%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
D	5.05%	5.55%	4.95%	5.60%	6.38%	6.86%	6.92%	6.20%	6.20%	6.57%	7.04%	6.33%	6.47%	5.91%	6.75%	7.73%	5.87%	6.29%	6.44%	6.88%	
E	6.66%	7.17%	6.32%	6.73%	7.63%	8.66%	8.20%	8.40%	7.42%	6.97%	7.74%	7.73%	7.86%	8.38%	7.95%	8.09%	7.90%	6.37%	7.72%	7.90%	
F	3.99%	3.85%	4.41%	3.56%	4.67%	4.39%	4.36%	4.40%	5.46%	4.60%	5.23%	5.45%	5.35%	4.71%	5.35%	5.33%	5.19%	5.32%	5.02%	5.10%	
G	8.79%	8.44%	7.74%	8.46%	10.33%	10.58%	9.95%	9.89%	10.32%	9.86%	10.65%	8.88%	9.60%	10.32%	9.69%	10.31%	9.10%	9.76%	9.52%	9.88%	
H	1.27%	1.54%	1.71%	1.08%	1.18%	1.67%	1.51%	1.26%	1.55%	2.04%	1.01%	2.02%	1.74%	2.02%	2.01%	1.60%	2.78%	1.77%	2.32%	2.55%	
I	8.32%	7.86%	8.38%	8.08%	9.93%	9.77%	10.01%	9.26%	9.51%	9.93%	10.15%	9.40%	9.67%	10.17%	9.69%	9.78%	10.61%	10.32%	9.97%	9.31%	
K	3.18%	3.01%	3.53%	2.32%	3.16%	3.15%	3.43%	2.90%	3.64%	4.60%	3.02%	4.31%	4.66%	3.89%	4.14%	4.27%	5.12%	4.68%	4.50%	4.53%	
L	11.38%	11.06%	10.63%	10.40%	14.01%	13.17%	13.21%	13.27%	13.42%	13.41%	13.57%	14.15%	14.39%	14.51%	14.17%	12.80%	13.77%	14.03%	13.19%	13.45%	
<b>M</b>	<b>2.04%</b>	<b>1.73%</b>	<b>1.76%</b>	<b>1.67%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.06%</b>	<b>0.08%</b>	<b>0.07%</b>	<b>0.07%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.09%</b>	<b>0.00%</b>	<b>0.08%</b>	<b>0.06%</b>	<b>0.06%</b>
N	3.78%	3.74%	4.07%	3.66%	5.39%	5.13%	4.94%	4.32%	3.98%	5.00%	4.62%	3.95%	4.66%	4.19%	4.34%	4.71%	4.44%	3.87%	4.63%	4.72%	
P	0.55%	0.50%	0.34%	0.48%	0.53%	0.56%	0.41%	0.47%	0.47%	0.46%	0.60%	0.53%	0.42%	0.52%	0.47%	0.62%	0.53%	0.40%	0.45%	0.57%	
Q	1.99%	2.04%	1.47%	1.83%	1.97%	2.35%	1.80%	1.88%	2.29%	2.04%	2.31%	1.76%	1.81%	2.09%	1.67%	1.87%	1.88%	1.94%	1.87%	2.17%	
R	1.02%	1.31%	1.27%	0.97%	1.25%	1.30%	1.34%	1.18%	1.55%	1.25%	1.21%	1.58%	1.53%	0.90%	1.67%	1.51%	1.58%	1.69%	2.19%	1.91%	
<b>S</b>	<b>7.60%</b>	<b>7.36%</b>	<b>7.50%</b>	<b>7.33%</b>	<b>1.32%</b>	<b>1.05%</b>	<b>1.16%</b>	<b>1.33%</b>	<b>1.35%</b>	<b>1.12%</b>	<b>1.01%</b>	<b>1.23%</b>	<b>0.83%</b>	<b>0.75%</b>	<b>0.87%</b>	<b>0.80%</b>	<b>0.75%</b>	<b>0.81%</b>	<b>0.90%</b>	<b>0.96%</b>	
<b>T</b>	<b>7.39%</b>	<b>7.86%</b>	<b>7.79%</b>	<b>7.92%</b>	<b>0.46%</b>	<b>0.37%</b>	<b>0.58%</b>	<b>0.39%</b>	<b>0.34%</b>	<b>0.13%</b>	<b>0.20%</b>	<b>0.18%</b>	<b>0.14%</b>	<b>0.15%</b>	<b>0.13%</b>	<b>0.36%</b>	<b>0.15%</b>	<b>0.24%</b>	<b>0.13%</b>	<b>0.19%</b>	
V	10.78%	10.83%	10.83%	11.75%	13.49%	12.43%	13.44%	14.21%	13.22%	12.89%	13.47%	13.27%	12.24%	12.64%	12.83%	12.71%	12.72%	13.15%	12.29%	12.62%	
<b>W</b>	<b>0.72%</b>	<b>0.77%</b>	<b>0.78%</b>	<b>0.70%</b>	<b>0.46%</b>	<b>0.25%</b>	<b>0.35%</b>	<b>0.55%</b>	<b>0.40%</b>	<b>0.46%</b>	<b>0.30%</b>	<b>0.44%</b>	<b>0.42%</b>	<b>0.22%</b>	<b>0.47%</b>	<b>0.18%</b>	<b>0.15%</b>	<b>0.24%</b>	<b>0.32%</b>	<b>0.06%</b>	
Y	2.84%	2.62%	2.65%	3.18%	3.03%	2.91%	2.85%	3.14%	2.83%	2.63%	2.41%	2.72%	3.20%	2.84%	2.74%	2.76%	2.41%	2.50%	2.77%	2.61%	

These data was based on the peptide identifications from the mouse tryptic peptide samples treated with different NaIO<sub>4</sub> concentration.

Table S4. Total identified glycosites and glycoproteins

Protein	Glycosite	Glycosite sequence window	Localization	probScore	diff Score	Score for localization	Modified sequence	Deamidation (N) Probabilities	Deamidation (N)	Score diffs	Position	Chargem/z	PNP	strategy_1PNP	strategy_2Conventional	HC strategy_1Conventional	HC strategy_2
IP100119299	385	ISGKSAVFHRIEGITN	YRIGVQHMPGQEI		1	126.485	126.48	SAVFHRIEGITN	(126.48)ETVYR		12	3	632	1	1	1	1
IP100856723	311	ISGNLFINNINKTNGTYRCEASNIVGKAH		0.999989	48.8495	148.89	VDDQM(x)PQHAVISGPNFINN	(de)IN(de)KTDN(de)GTYR			26	3	1131	1	1	1	1
IP100131143	604	AAFTIDQREAITVGENETYPRAI	IHWNRAS		1	60.1571	175.15	EATIVGEN	(de)ETVYR		8	2	740	1	1	1	1
IP100113039	90	NANWRIISQQRISHYNDTYP	ISPPQRTPGI		1	70.197	165.34	ISHYN	(de)DTYPISSPQR		5	2	895	1	1	1	1
IP100387318	297	RDDIHPTIPAGQYFINI	TYNPVHISFDGRK		1	56.4677	198.49	RDDIHPTIPAGQYFIN	(de)ITYN(de)YPVHISFDGR		16	3	1137	1	1	1	1
IP100308971	740	DRDAGVGFPEYQEDNSTYNFRWTSYACPE		0.99988	39.192	147.17	DAGVGFPEYQEDN	(de)STYNFR			14	3	780	1	1	1	1
IP100266264	679	IEQKAITDTGKNAVNTYKNEDECCVRFQY		0.997174	25.564	168.1	NAVNTYKNEDECCVVR				4	2	979	1	1	1	1
IP100876541	254	PGSIHKAENEQVIQNIHNTYKMDYNSFQGTSP		0.994056	22.2333	149	ANEQVIQNI	(de)HTYK			10	2	837	1	1	1	1
IP100411025	300	VVSHTVAWSSGRGFNATYHVRGYPWDRP			90.6291	117.7	GFN	(de)ATYHVR			3	2	533	1	1	1	1
IP100876541	538	GAESVIMTKSTREWNHTYHCIFRKYNSYSI			58.6993	93.839	EWN	(de)GTYHCIFR			3	3	495	1	1	1	1
IP100128249	176	VHTVNTAAAFNTQNGTYFKIVEISRAQNV		0.981244	17.2149	141.48	CPIITPFFNTQNGTYFKIVEISRAQNV	(de)TAIAAFN(de)TQN(de)N(de)GTYFK			28	4	922	1	1	1	1
IP100273133	582	DPIEQSVRISCRADNNTYEHIRWRYNIST			85.8127	114.86	ADN	(de)TYEHIR			3	2	642	1	1	1	1
IP100858318	71	ISVNAPTPYIKAFYNGTWYRHQPDPDPT			91.8667	91.867	AFYN	(de)GTWYRR			4	2	668	1	1	1	1
IP100121378	167	KKIGDCISRSDSPDGNITWYRNGVILQPVEG			63.6623	164.15	DSYDPGN	(de)ITWYRN(de)GK			7	3	597	1	1	1	1
IP100122973	409	HVIYGRIDEDTDCIGNWTEGSGQTIKQA			50.2259	175.52	IDETDCIGN	(de)WTEGSGQTIK			9	3	837	1	1	1	1
IP100118069	37	IIVQIAGAGIPEKAFNITWISTDFKTIIEWQ			100.187	102.97	AFN	(de)ITWISTDFK			3	2	722	1	1	1	1
IP100110808	143	NIIICFDIKFSPVYVNTWLRNGRPTVEGS			137.895	137.89	FSPVYN	(de)VTWIR			7	3	473	1	1	1	1
IP100128206	296	PWTLIQHRKDGSDFNENWENYKGFGRIDG			76.0231	149.52	KDGSQDFN	(de)ETWENYK			8	2	966	1	1	1	1
IP100119299	164	IIKWNDRGSAIHPHSNATWEIKVQNPRTPEP			71.2794	141.85	GSAIHPHSN	(de)ATWEIK			9	2	805	1	1	1	1
IP100314549	65	KIMQDPQQAGGIYCNRTWDGVIOWNDVAAG			186.565	186.56	IM	(ox)QDPIQQAGGIYCN	(de)R		15	3	652	1	1	1	1
IP100123342	862	QVTFVEVMTTIEKVINDTWAWKNTAIEAQV			87.49	283.49	VIN	(de)DTWAWK	(de)ATIAEQ(de)AK		3	2	1032	1	1	1	1
IP100126253	19	TYDYFWWERIWIYPNITWADIEDKDRGVA			75.9683	169.28	IWIYPN	(de)ITWADIEDKDRG			6	3	715	1	1	1	1
IP100111163	292	GKFDVYDAIAGAHPIITVYKEEIPERWHY			154.187	203.89	FDEVYDAIAGAHPI	(de)ITVYK			14	2	1063	1	1	1	1
IP100110264	491	TWDPVIAERNGHITNYTVYVRDINSQIEIQ			73.4663	73.466	N	(de)GHITN	(de)YTVYVR		6	2	720	1	1	1	1
IP100119063	1512	WRNTIILAKANKWGHNTVYVRTNQPTFDI			83.0451	162.48	WTGHN	(de)YTVYVR			5	2	649	1	1	1	1
IP100112032	258	NDIKGSIKIKSAIQNIIVVQKQEQDILISNG			160.524	174.95	ISQAIQN	(de)ITVVQK			7	3	458	1	1	1	1
IP100469218	160	NKAYRCVSDIRVYMNKNTVIRDAITQAYIS			73.8853	147.91	YMN	(ox)KN(de)VTVVIR			5	3	447	1	1	1	1
IP100331175	331	ANRNFDTCAKMQVSVNGVTTAIVRIFCNGS			136.299	161.84	M	(ox)QVSVN(de)GTVTTAIVR			6	3	561	1	1	1	1
IP100123223	313	IQSKKRYEYQIFHVNATVTEEGTIEFERS			79.4397	318.66	NEYVQIFHVN	(de)ATVTEEGTIEFSR			10	3	914	1	1	1	1
IP100323134	402	FYGEVPEVRVDIVANIIVTDKQHPHTPAWN			71.5274	95.624	VDIVAN	(de)ITVTDKQHPHTPAWN	(de)AAYR		7	3	966	1	1	1	1
IP100114256	72	KTEIQVNCPKVGNKQVTTATFGYPRIRNQ			69.3307	216.72	VGVN	(de)KN(de)QVTTATFGYPRIR			6	3	668	1	1	1	1
IP100129677	78	SQIREDIITAIHQVPSNIIVTSTEDQVKAISTQ			48.8985	216.71	QN	(de)FSN(de)IVTSTEDQVK			5	2	856	1	1	1	1
IP100226932	917	YSPDQVHAERFINYNQVSRMRGIYATPSG			122.691	122.69	FIN	(de)YN(de)QVSR			5	2	622	1	1	1	1
IP100320241	261	VKHRIIPERRGDYITVNTVIVEIVGPFEMD			38.9248	165.13	RGGDIYTN	(de)VTVSIVEIVGPFEMD	(ox)DITHIDGHK		8	4	866	1	1	1	1
IP100127406	66	ETEGYRFRFISQAEFFNYVTRIGIGQEWRRG			53.001	174.39	IISQAEFFN	(de)YTVR			9	2	812	1	1	1	1
IP100319509	106	PYITPNNQGIYIFQNGNSTRVFTNQITDVI			72.5683	222.91	VIIRPYITPN	(de)N(de)QGIYIFQGN	(de)STVR		20	4	692	1	1	1	1
IP100330632	94	NATKAIIQGIIPPEQNTVQIITAYIKDQESK			76.1546	161.35	AIIQGIIPPEQN	(de)YTVQIITAYIKD			13	3	895	1	1	1	1
IP100134808	227	GFRIVGSPFICTVNTKNTVPPVSSSPTCEK			62.528	191.79	IVGSPFICTVNTK	(de)K			11	3	498	1	1	1	1
IP100653675	647	SCHGDSGGAFAPVNPVYKPYAGIVSWG			56.0552	84.946	GVDSCHGDSGGAFAPVNPV	(de)YVTPK			19	3	816	1	1	1	1
IP100409148	256	MIPVADQDKCVVHYENSTVPEKNIITSPVGV			103.263	235.73	YVMPVADQDKCVVHYEN	(de)STVPEK			18	3	989	1	1	1	1
IP100125813	679	YMGIPPEDNIDHRYNSTVMSRAEHFQVEY			54.3685	106.16	YMGIPPEDN	(de)IDHRYN	(de)STVM(ox)SR		16	3	881	1	1	1	1
IP100322463	183	DTVWFKICPHFAMIGNDVMCTEGQNWTRIP			87.5088	136.68	CIPHAMIGN	(de)WTRIPCEIEVK			10	4	936	1	1	1	1
IP100123925	679	FMGIPKDDNIIEHYKNSTMARAEIFRNVQY		0.999604	34.0229	94.057	FM	(ox)GIPKDDNIIEHYKN	(de)STVM(ox)AR		16	3	867	1	1	1	1
IP100658311	153	FHVHPVTPQPIQVNTNITVKEIDSVTITCIS			193.19	199.01	FHVHPVTPQPIQVNTN	(de)TTVK			16	3	775	1	1	1	1
IP100108535	333	ITVIEPTQPIQVNTNITVKEIDSVTITCIS			69.98	192.27	ITVIEPTQPIQVNTN	(de)TTVK			21	4	694	1	1	1	1
IP100134808	275	KATYTHDRSRLACINGTIRGRHVEICQNG			104.523	180.07	IACIN	(de)GTVIR			5	2	559	1	1	1	1
IP100317356	324	NIISSEPKIIVVYAENGTIQGTTVASVYK			67.3964	217.86	ITVYAEN	(de)GTVYK(de)GTTVASVYK			8	3	772	1	1	1	1
IP100320618	53	CSHIKITHIPDDIPSNITVINITHNQIR			69.5832	153.25	ITHIPDDIPSN	(de)ITVIN	(de)ITHNQIR		11	3	876	1	1	1	1
IP100467600	2400	HHTTNVNSFYDDIIVNGTIVIKRISQRIIT			71.1476	181.54	DIEHHTN	(de)VNFYDDIIVN	(de)GTVIK		19	3	916	1	1	1	1
IP100405742	1072	VVIFISPAVPEPEAYNITVIRDMGHPCARIP			70.8373	171.98	VVIFISPAVPEPEAYN	(de)ITVIR			16	4	615	1	1	1	1
IP100108535	317	FVNSVGTISRTTVKNIIVIEPVTQPIQVT			69.98	192.27	ITVKN	(de)ITVIEPTQPIQVNTN	(de)TTVK		5	4	694	1	1	1	1
IP100228567	101	KVIVFSEDEGYFIRAWNYVDTPHGMFVSGTP			55.3139	127.2	AWN	(de)YVDTPHGMVSGTPPEQSVMITDVGSGPYGHTVVK			3	5	863	1	1	1	1
IP100121550	266	IQPKYIQPIIAYQFTNITVDTEIRVECKAYG			70.4517	288.25	YIQPIIAYQFTN	(de)ITVDTEIRVECK			12	3	951	1	1	1	1
IP100119063	240	PTSTRQTAMDFSYANETVWVHGSDSAAGT			36.483	48.759	QTTAM	(ox)DFSYAN	(de)ETVWVHGSDSAAGTQIK		11	3	1092	1	1	1	1
IP100128399	79	RFAPPQAPAEPSWSSKNATTYPPMCSQDAAR			67.3255	124.16	N	(de)ATTYPPM(ox)CSQDAAR			1	2	850	1	1	1	1
IP100649186	187	CFAIHASKGVIMVNETTYEDGHGARKNIT			55.8813	245.19	GVIM	(ox)VGN	(de)ETTYEDGHGARKN	(de)ITDIIVEGAK	7	3	1031	1	1	1	1
IP100225072	169	FMNYSVSSVFKERIGNVTTWISSNPVYFA			48.1796	52.707	IGN	(de)VTTWISSN	(de)PPVFAAIYWEEDVDSGHK		3	3	1136	1	1	1	1
IP100123342	515	GIFGDPEDIRVFSQNIITVYKIGVGSFKK			81.9197	98.407	VFGSQN	(de)ITTVKIK			6	3	479	1	1	1	1
IP100467600	1750	NIITVPGKASGRVILINITVAANHGVTFSK			66.0588	218.28	VILIN	(de)ITVAAN	(de)HGYTK		4	3	573	1	1	1	1
IP100108849	320	GAFKTKVHDGDFEYNIITTTIAAINKIRIFK			98.0604	138.66	TGVDHGDFFEYN	(de)ITTTIAAINK			11	3	761	1	1	1	1
IP100318175	413	IDQDFVYSPTFQDIINRITGRTGWYKDIH			95.2051	97.32	M	(ox)PPFIDQDFVYSPTFQDIIN	(de)R		14	3	854	1	1	1	1
IP100322304	134	TRYSNESQDISVNGYNTCTSSVSSAIR			120.33	120.33	YSN	(de)ESQDISVN	(de)GYN	(de)CTSSVSSAIR	20	3	915	1	1	1	1
IP100230319	140	NDISSHNSTICTIENQNTSITGTSPEIMEK			50.4134	115.47	YATEN	(de)DISSHN	(de)STIICIVN	(de)QTTSSITGTSPEIM(ox)EK	10	4	969	1	1	1	1
IP100130654	402	RENPGCYRHVEDKFNETTQRSIAMVQJCEK			82.2607	176.18	HVEDKFN	(de)ETTTQ	(de)R		7	3	503	1	1	1	1
IP100316469	613	VMSWWDYGYGIAGMANRITVDNNWNSHI			121.188	220.21	VMSWWDYGYGIAGMAN	(R)			16	2	1041	1	1	1	1
IP100850413	234	YMNWNYMILNARHINITTISVAGFRDYQV			82.5294	171.26	HIN	(de)ITTISVAGFR			3	2	744	1	1	1	1
IP100127447	105	TYREIRNKANIQGGENGTTISAVTNKAYVFE			77.8819	263.55	N	(de)KANIQFGEN	(de)GTTISAVTNK		10	2	1055	1	1	1	1
IP100349830	235	RINSAPVEGYSEHVNKTTIRMTYPEGAPIS			79.88	205.68	IN	(de)SAPVEGYSEHVN	(de)KTTIR		15	3</					

IPI00406901	74	SQHRVIFVYKDDAMVYVNTSREHTESYVIPA	1	74.4284	74.769	74.428	_VIFYKDDAM(ox) VYN(de) VTSR_	VIFYKDDAMVYN(1) VTSR	VIFYKDDAMVYN(74.43) VTSR	12	2	969	1	1	1
IPI00466652	197	DFINHSSARGVSSSENFTSPVMEFWERRVIG	1	74.7718	188.04	74.772	_GVSSSEN(de) FTSPVM(ox) EFWERR	GVSSSEN(1) FTSPVMEFWERR	GVSSSEN(74.77) FTSPVMEFWERR	12	3	755	1	1	1
IPI00409148	264	KCVVHVENSTVPEKKNITSVPVGVQPI NEHT	1	68.2351	123.36	123.36	_KN(de) ITSPVGVQPI NEHTFCAGITK_	KN(1) ITSPVGVQPI NEHTFCAGITK	KN(68.24) ITSPVGVQPI IN(-68.24)	2	3	876	1	1	1
IPI00132474	212	STTPAKIRNPNCTSEQNCNTPSFPYKNVISITD	1	96.7715	168.08	152.32	_NPCTSEQN(de) CTSPFSYK	NPCTSEQN(1) CTSPFSYK	N(-96.77) NPCTSEQN(96.77) CTSPF	8	2	961	1	1	1
IPI00125182	368	CWWRISVTPGEKIIINFTSMDIYRSRIGWYD	1	80.5221	101.89	80.522	_I IIN(de) FTSM(ox) DIYR	I IIN(1) FTSMDIYR	I IIN(80.52) FTSMDIYR	4	2	752	1	1	1
IPI00121776	61	MYNNWNRIPSSJENATSISIMNITGTAI C	1	59.046	61.499	59.046	_IPSSJEN(de) ATISISIMN(ox) N(de) ITGTAICHISDIPDPGIR	IPSSJEN(1) ATISISIMN(1) ITGTAICHISDIPDPGIR	IPSSJEN(59.05) ATISISIMN(59.05)	7	4	879	1	1	1
IPI00228719	257	SHAGMVQVAIQTFGNQTSIPAGGAGVYKI	1	56.7083	356.04	56.708	_QVAIQTFGN(de) QTSIIPAGGAGYK	QVAIQTFGN(1) QTSIIPAGGAGYK	QVAIQTFGN(56.71) QTSIIPAGGAGYK	9	3	741	1	1	1
IPI00115793	117	PPFGIFVDFRNTGEINITSIDREETPYFII	0.999901	40.0535	179.33	179.33	_NTEGEIN(de) ITSIDREETPYFIITGYAIDSR	NTEGEIN(1) ITSIDREETPYFIITGYAIDSR	N(-40.05) TGEIN(40.05) ITSIDIR	6	3	1102	1	1	1
IPI00121190	444	RTKQHQQFSIAVVGINITSIGRSIKEISDG	1	57.6158	107.03	57.616	_QHQQFSIAVVGIN(de) ITSIGIR	QHQQFSIAVVGIN(1) ITSIGIR	QHQQFSIAVVGIN(57.62) ITSIGIR	13	3	704	1	1	1
IPI00137599	176	EAIKIAYCEERCNCNITSIEDEDFCKTVTS	1	67.1935	280.7	280.7	_CGNKN(de) ITSIEDEDFCK	CGNKN(1) ITSIEDEDFCK	CGN(-67.19) CN(67.19) ITSIEDED	5	2	982	1	1	1
IPI00410796	392	IGHYKPDITAVVIENTSIRDRII IDIST	1	78.3239	88.396	78.324	_KPIIGHYKPDITAVVIEN(de) GTSIDR	KPIIGHYKPDITAVVIEN(1) GTSIDR	KPIIGHYKPDITAVVIEN(78.32) GTS	18	3	880	1	1	1
IPI00876558	524	MASGTWNPKGPDISNCTSHHVNQIAQKIRS	1	64.9411	182.02	182.02	_GPDISN(de) CTSHHVNQIAQK	GPDISN(1) CTSHHVNQIAQK	GPDISN(64.94) CTSHHVN(-64.94)	6	3	686	1	1	1
IPI00321375	335	IAQVATNPQGITGTGNITSEMDPSSHRRPKI	1	99.0645	186.96	99.064	_GHIIIAQVATN(de) PQGITGTGN(de) TTSEM(ox) DPSHR	GHIIIAQVATN(1) PQGITGTGN(1) TTSEGHIIIAQVATN(99.06) PQGITGTGN(99.06)	20	3	1041	1	1	1	
IPI00122399	577	KCQGDASRICHTHGWNETSEIMPPGAVFSCI	1	55.7342	55.734	55.734	_ICHTHGWN(de) ETSEIM(ox) PPGAVFSCIYR	ICHTHGWN(1) ETSEIMPPGAVFSCIYR	ICHTHGWN(55.73) ETSEIMPPGAVFSCI	8	3	994	1	1	1
IPI00113528	172	KKIEIGFGNRIVDVNIITSEGGKVI VNPNTKI	1	96.8656	154.36	96.866	_IVDVN(de) ITSEGGVK	IVDVN(1) ITSEGGVK	IVDVN(96.87) ITSEGGVK	5	2	702	1	1	1
IPI01026704	1007	GHPMPFELRIALISFPNITSDGVPYIYPTGWS	1	76.7951	164.31	164.31	_LAISFPN(de) ITSDGVPYIYPTGWS	LAISFPN(1) ITSDGVPYIYPTGWS	LAISFPN(76.8) ITSDGVPYIYPTGWS	7	3	1196	1	1	1
IPI00330632	1389	VDCKEVGQKAINASANITSDGVEVIGRMVRS	1	103.17	207.76	103.17	_AIN(de) ASAN(de) ITSDGVEVIGR	AIN(1) ASAN(1) ITSDGVEVIGR	AIN(103.17) ASAN(103.17) ITSDG	7	2	895	1	1	1
IPI00131881	279	SGIRNIFPMVKRIRINTTSEDEKPTNPRFRP	1	107.656	173.71	173.71	_IN(de) TTSDEKPTNPRFRP	IN(1) TTSDEKPTNPRFRP	IN(107.66) TTSDEKPTN(-107.66)	2	5	868	1	1	1
IPI00124221	124	DIESFIPKPYVVEEQKNITSCDPGAPFIQHGP	1	49.2085	97.312	49.209	_IVEDIESFIPKPYVEEQKN(de) ITSCDPGAPFIQHGP	IVEDIESFIPKPYVEEQKN(1) ITSCDPGAPFIQHGP	IVEDIESFIPKPYVEEQKN(49.21) IT	19	2	857	1	1	1
IPI00387318	98	TGTEPSSPCNKISPNVTSACTINFTIKQS	1	172.496	224.86	172.5	_CISPN(de) VTSACTIN(de) FTIK	CISPN(1) VTSACTIN(1) FTIK	CISPN(172.5) VTSACTIN(172.5)	5	2	1044	1	1	1
IPI00467180	104	VSHTVVIRPIKAGYFNFTSATIYYIAQEDGP	1	88.5435	138.88	88.544	_AGYFN(de) FTSATIYYIAQEDGP	AGYFN(1) FTSATIYYIAQEDGP	AGYFN(88.54) FTSATIYYIAQEDGP	5	4	965	1	1	1
IPI00119039	153	HKGKVVMDIPYEIWNETSIAEVADIKKQCV	1	72.1837	135.38	72.184	_VVM(ox) DIPYEIWN(de) ETSAEVADIK	VVM(1) DIPYEIWN(1) ETSAEVADIK	VVM(1) DIPYEIWN(72.18) ETSAEVADIK	11	4	643	1	1	1
IPI00131216	276	TRPIAEKIAVIGCKNNTSAAVHICIRKQTE	1	90.697	117.93	90.697	_N(de) TTSAAM(ox) VHICIR	N(1) TTSAAMVHICIR	N(90.7) TTSAAMVHICIR	1	2	689	1	1	1
IPI00469218	102	ITFGRGYIIITNFKNTRYSVQHMVFTYNI	1	65.0429	296.22	65.043	_GYLIITIN(de) FTKN(de) TTR	GYLIITIN(1) FTKN(1) TTR	GYLIITIN(65.04) FTKN(65.04) TTR	11	2	822	1	1	1
IPI00321375	105	GVQIIVFPEDGIHGFnFTRTSIPPFDMP	1	88.7296	160.43	88.73	_GVQ(de) IIVFPEDGIHGFn(de) FTR	GVQIIVFPEDGIHGFn(1) FTR	GVQIIVFPEDGIHGFn(88.73) FTR	16	3	717	1	1	1
IPI00113750	290	HWEIDIDIEKIIVHPNYTRSSDNDIATIRI	1	83.499	175.15	83.499	_EIIVHPN(de) YTR	EIIVHPN(1) YTR	EIIVHPN(83.5) YTR	7	3	415	1	1	1
IPI00120674	696	DPRGRSIRAFDETKNTRRRTPVGMIGKQV	0.995914	23.8688	141.08	138.76	_AFFDETKN(de) NTR	AFFDETKN(0.996) N(0.004) TR	AFFDETKN(23.87) N(-23.87) TR	8	2	672	1	1	1
IPI00120245	704	NNEAIARISCAFKNENQTRQVCDIGNPKA	1	134.562	134.56	134.56	_ISCAFKNEN(de) QTR	ISCAFKNEN(1) QTR	ISCAFKNEN(134.56) QTR	9	2	728	1	1	1
IPI00154056	167	IKFPGCPRYEQINQTRQTPPEQNRSIQN	1	106.291	106.29	106.29	_YEIQN(de) ETR	YEIQN(1) ETR	YEIQN(106.29) ETR	6	2	591	1	1	1
IPI00133500	44	NVIFPPHTTPKAEISNHTRPVIIVPGCIGNR	1	88.3601	133.45	88.3601	_AETSN(de) HTRPVIIVPGCIGNR	AETSN(1) HTRPVIIVPGCIGNR	AETSN(88.36) HTRPVIIVPGCIGNR(-)	5	3	735	1	1	1
IPI00319509	573	TGEISQKHFI LDKSNVTRPSEFNWIWIPI	1	109.717	137.14	109.72	_SN(de) VTRPSEFN(de) YWIWIPI	SN(1) VTRPSEFN(1) YWIWIPI	SN(109.72) VTRPSEFN(109.72) YI	2	2	1248	1	1	1
IPI00108535	206	DRKIRISEGNRTIITINVRNDITGPVVCETR	1	111.064	238.19	111.06	_TIITIN(de) VTRN(de) DTGPVVCETR	TIITIN(1) VTRN(1) DTGPVVCETR	TIITIN(111.06) VTRN(111.06) DT	6	3	776	1	1	1
IPI00153468	117	FTSHTPDHQI CIIHNSRMAIFAGKIRVH	1	68.4105	197.67	68.41	_FTSHTPDHQI CIIHNSN(de) STR	FTSHTPDHQI CIIHNSN(1) STR	FTSHTPDHQI CIIHNSN(68.41) STR	18	3	816	1	1	1
IPI00404551	261	GGTDSKYHGEISYINVTTRKAYVQHMDQTE	1	110.306	203.7	110.31	_YHGEISYIN(de) VTRK	YHGEISYIN(1) VTRK	YHGEISYIN(110.31) VTRK	10	3	582	1	1	1
IPI00130573	521	PDMEIFRIRFANEYPNITRISYIGKSVESRE	0.999999	60.3787	134.99	134.99	_RFANEYPN(de) ITR	RFANEYPN(1) ITR	RFAN(-60.38) EYPN(60.38) ITR	8	2	691	1	1	1
IPI00322463	193	FAMILGNDVMTCEQGNWTRIPCEIYKCPPP	1	87.5088	136.68	87.509	_CIPHFAM(ox) IGN(de) DTMV(ox) CTEQGN(de) WTRIPCEIYK	CIPHFAM(1) DTMVCEQGN(1) WTRIPCEIYK	CIPHFAM(87.51) DTMVCEQGN(87.51)	24	4	936	1	1	1
IPI00749655	700	FCIIDVMSGSSVGNATRIAHQIHQRIRKS	1	90.9116	90.912	90.912	_ICEGRFClDVMSTGSSVGN(de) ATR	ICEGRFClDVMSTGSSVGN(1) ATR	ICEGRFClDVMSTGSSVGN(90.91)	22	3	917	1	1	1
IPI00132189	117	NTQADV INASWSVSNSTRHEIERSDFCCGI	1	113.21	263.55	141.6	_NTQADV IN(de) ASWSVSN(de) STRHEIER	NTQADV IN(1) ASWSVSN(1) STRHEIER	NTQADV IN(-104.43) TQADV IN(104.43) ASW	16	3	910	1	1	1
IPI00125813	614	QDVQMPKSKIDFIVNETRWFYQMIIPPHFD	1	86.0142	129.37	86.014	_KIDFIVIN(de) ETR	KIDFIVIN(1) ETR	KIDFIVIN(86.01) ETR	8	3	450	1	1	1
IPI00134585	373	YEGGTWDAIAEAISSNHRFSAADRSFIDD	1	85.0562	153.65	123.43	_VNYEGGTWDAIAEAISSN(de) HTR	VNYEGGTWDAIAEAISSN(1) HTR	VN(-85.06) YEGGTWDAIAEAISSN(8)	18	3	803	1	1	1
IPI01026704	531	GTEEEQKQVYVAVNQTREYQMSIEPIKQ	1	80.1016	94.692	80.102	_VYVAVN(de) QTR	VYVAVN(1) QTR	VYVAVN(80.1) QTR	7	2	607	1	1	1
IPI00307966	104	IISTFKGAFVSKNPCNITREYAPIVIVTQ	0.998733	28.9665	174.87	139.48	_GAFVSKNPCN(de) ITR	GAFVSKN(0.001) PCN(0.999) ITR	GAFVSKN(-28.97) PCN(28.97) ITR	10	2	733	1	1	1
IPI00123040	415	IQARRIADWESIGYNI TRCHTFNVTICYHY	1	151.994	170.66	151.99	_RIADWESIGYN(de) ITR	RIADWESIGYN(1) ITR	RIADWESIGYN(151.99) ITR	12	3	599	1	1	1
IPI00129250	318	ICRWIVANRNMFSQNDTRCAGPEAKGQRI	1	87.3076	138.4	87.308	_M(ox) FSNQ(de) DTR	M(1) DTR	MFSQN(87.31) DTR	5	2	508	1	1	1
IPI00123342	922	NKAKFTKPRFRPKDKNGTAEPPINASAGDQ	1	112.549	112.55	112.55	_DKN(de) GTRAEPPIIN(de) ASAGDQEEK	DKN(1) GTRAEPPIIN(1) ASAGDQEEK	DKN(112.55) GTRAEPPIIN(112.55)	3	2	1115	1	1	1
IPI00125813	144	YDVNKRQIITEEKIPNNTQWITWSPGEGKIA	1	76.0266	257.73	76.027	_QIITEEKIPN(de) N(de) TQWITWSPGEGK	QIITEEKIPN(1) N(1) TQWITWSPGEGK	QIITEEKIPN(76.03) N(76.03) TQW	10	3	918	1	1	1
IPI00469426	379	ANTGEGPQRNKVFKTNSQVSDVRAMINASIS	1	150.111	150.11	150.11	_VFKTN(de) STQVSDVR	VFKTN(1) STQVSDVR	VFKTN(150.11) STQVSDVR	5	2	741	1	1	1
IPI00116744	300	ISHLVDPKDI EPPRAANCTQVIVWHTREKPK	1	117.916	148.57	117.92	_AAN(de) CTQVIVWHTR	AAN(1) CTQVIVWHTR	AAN(117.92) CTQVIVWHTR	3	3	520	1	1	1
IPI00406302	101	SKGDHITQIIEG IQFNITQTSIADIHKSFGH	1	40.81	193.42	40.81	_GDHITQIIEG IQFN(de) ITQTSIADIHK	GDHITQIIEG IQFN(1) ITQTSIADIHK	GDHITQIIEG IQFN(40.81) ITQTSIADIH	14	4	700	1	1	1
IPI00625835	135	SPTSNISSNFIC IENRTQIKPTQDPTECV	1	135.211	184.68	135.21	_YKYETTISPTSIN(de) ISSN(de) SFICIEN(de) R	YKYETTISPTSIN(1) ISSN(1) SFICIEN	YKYETTISPTSIN(135.21) ISSN(135)	2	3	943	1	1	1
IPI00110910	46	ERHFVVQFKGGECCYNTGTQRRIRVTRYINR	1	107.166	197.07	107.17	_GECYTN(de) GTQR	GECYTN(1) GTQR	GECYTN(107.17) GTQR	7	2	675	1	1	1
IPI00123223	993	NMIFANPNIYIKYINETQIQTKIKTKAIG	1	110.51	162.68	110.51	_YIN(de) ETQQIQTKIK	YIN(1) ETQQIQTKIK	YIN(110.51) ETQQIQTKIK	3	2	804	1	1	1
IPI00621027	155	IRSFRRGFTDCAIANMTQIQIRHQVKGQVYN	1	123.023	279.44	123.02	_RGTFTDCAIAN(de) M(ox) TQQIR	RGTFTDCAIAN(1) MTQQIR	RGTFTDCAIAN(123.02) MTQQIR	11	3	667	1	1	1
IPI00123704	238	IDIMYPFYQKGFHVNTQPIVAVKFINVTP	1	80.2447	118.24	80.245	_FHVN(de) YTPQIVAVK	FHVN(1) YTPQIVAVK	FHVN(80.24) YTPQIVAVK	4	3	506	1	1	1
IPI00987886	409	GTCIQVQPQDGHGKNQTNQIKSSGGQYIM	0.999995	52.5913	115.12	115.12	_GHICN(de) QTNQIKSS	GHICN(1) QTNQIKSS	GHICN(52.59) QTNQ(-52.59) IQSS	5	3	539	1	1	1
IPI00894972	444	QQVILFQAPAEAGGRWNQTKIEG TIIGSYFQ	1	93.6838	93.684	93.684	_YQHVGQVILFQAPAEAGGRWN(de) QTKQ	YQHVGQVILFQAPAEAGGRWN(1) QTKQ	YQHVGQVILFQAPAEAGGRWN(93.68) Q	20	4	690	1	1	1
IPI00310090	201	RFYEEFPI INKRTGEANIQT IYTQEAIDFIQT	1	254.399	254.4	254.4	_TGEAN(de) ITQIYTYQEAIDFIQTQHAR	TGEAN(1) ITQIYTYQEAIDFIQTQHAR	TGEAN(254.4) ITQIYTYQEAIDFIQTQ	5	3	917	1	1	1
IPI00310567	254	IAHEIHVIEKQPMNIITQIKVIQIGTIVDN	1	54.5594	142.23	54.559	_YVYVADIAHEIHVIEKQPMN(de) M(ox) N(de) ITQIK	YVYVADIAHEIHVIEKQPMN(1) MN(1) YVYVADIAHEIHVIEKQPMN(54.56) M	22	4	800	1	1	1	
IPI00474580	46	RPRFIEYVTSCECHFYNGTQHVRFRIFRYNR	1	111.659	115.8	111.66	_FIEYVTSCECHFYN(de) GTQHR	FIEYVTSCECHFYN(1) GTQHR	FIEYVTSCECHFYN(111.66) GTQHR	13	2	1195	1	1	1
IPI00129526	817	AFIVADKIVTSKHNDTQHIWESDNEFSV	1	62.6482	200.99	62.648	_HN(de) N(de) DTQHIWESDNI(de) EFSVIADPR	HN(1) N(1) DTQHIWESDNI(1) EFSVIADPR	HN(62.65) N(62.65) DTQHIWESDNI	3	3	905	1	1	1
IPI00312711	214	IISIDDPQRGMILINDTQHFSNNVKGIEGQ	1	71.2794	94.02	71.279	_GIM(ox) I IIN(de) DTQHFSN(de) N(de) VK	GIMI IIN(1) DTQHFSN(1) N(1) VK	GIMI IIN(71.28) DTQHFSN(71.28)	7	3	655	1	1	1
IPI00121240	187	IPPIDIVREFKASVNVVTHCTMESWESMNE	1	46.9529	143.04	46.953	_ASVYN(de) VTQHCTM(ox) ESWESM(ox) N(de) EVAR	ASVYN(1) VTQHCTMESWESM(1) EVAR	ASVYN(46.95) VTQHCTMESWESM(4)	5	3	900	1	1	1
IPI00131168	150	SIMKTWANFAKYGHNPNGTGNSTWVPVFTST	1	108.18	108.18	108.18	_YGHPN(de) GTQGN(de) STM(ox) WVPVFTSTEQK	YGHPN(1) GTQGN(1) STMWVPVFTSTEQK	YGHPN(108.18) GTQGN(108.18) ST	5	3	862	1	1	1
IPI00135635	814	QQPTEATKIINDYVSNQTMGMIKKI ISEIDD	1	107.15	211.7	211.7	_IINDVSN(de) QTMGMI(ox) IK	IINDVSN(1) QTMGMIK	IIN(-107.15) DVSN(107.15) QTQ	8	2	871	1	1	1
IPI00131830	185	QQPTEAKNIINDYVSNQTMGMIKKI ISEI	1	124.458	250.52	124.46	_N(de) I IIN(de) DVYSN(de) QTMGMI(ox) IK	N(1) IIN(1) DVYSN(1) QTMGMIK	N(124.46) IIN(124.46) DVYSN(124)	9	2	929	1	1	1
IPI00116105	169														











IPI00129485	75	EDTVTITCEGTHNPGNSSTQWFHNGRSIRSQ	1	66.1369	199.99	66.137	EDTVTITCEGTHN (de) PGN (de) SSTQWFHN (de) GR	EDTVTITCEGTHN (1) PGN (1) SSTQWFHN (de) EDTVTITCEGTHN (66.14) PGN (66.14)	16	3	983	1	1	1	1	
IPI00122257	335	ATIKADINQRWIKIDNYSSTQEIIGRTIIVYIDG	1	90.7928	190.85	90.793	_IKIDN (de) YSTQEIGR	IKIDN (1) YSTQEIGR	5	3	513	1	1	1	1	
IPI01023131	137	F1YDFNSYWRVHSGNFSTIPQYFKNGYVT	1	54.0231	69.345	54.023	_VHSGN (de) FSTIPQYFK	VHSGN (54.02) FSTIPQYFK	5	1	543	1	1	1	1	
IPI00124666	55	YEEISQIRHFQKQTYNSTIIEEASERIIV	1	110.769	252.05	110.77	_HFQKQTN (de) YSTIIEEASER	HFQKQTN (110.77) YSTIIEEASER	8	2	1177	1	1	1	1	
IPI00173181	184	SPEVREIIVDEIISNSSTIASYKTEYVEDP	1	54.0044	181.34	54.004	_EIIIVDEIISN (de) SSTIASYK	EIIIVDEIISN (54) SSTIASYK	10	3	662	1	1	1	1	
IPI01023214	290	IINISRSKSDTQNIYVNSTGRAMVAGTSFYA	0.999999	62.6333	153.39	153.39	_KSDTQNIYV (de) VSTGR	KSDTQNIYV (1) VSTGR	10	3	566	1	1	1	1	
IPI00322497	250	IKFRFIRNGIASGSGNCSGTGNGDGFHAW	1	166.653	166.65	166.65	_N (de) GIASGSGN (de) CSTGPN (de) GDGSHAW	N (1) GIASGSGN (1) CSTGPN (1) GDGSHAW (166.65) GIASGSGN (166.65) CST	9	3	975	1	1	1	1	
IPI00322575	71	FSSIPDVIDGRIDSFNDSFMIVYTPITPT	1	150.909	150.91	150.91	_IDSFN (de) DSTFM (ox) IVYTPITPTTQR	IDSFN (1) DSTFMIVYTPITPTTQR	5	1	1283	1	1	1	1	
IPI01026704	317	IQRFSIATIGHYNRGNIISTEKFVEEIKIAS	1	68.8302	88.021	68.83	_GN (de) ISTEKFVEEIK	GN (68.83) ISTEKFVEEIK	2	2	748	1	1	1	1	
IPI01008227	330	PPNEGFCPCRESGIQNVSTCRFGAPIFISHP	1	103.909	107.97	103.91	_ESGIQN (de) VSTCR	ESGIQN (1) VSTCR	6	2	626	1	1	1	1	
IPI00123428	85	GVGRDNVSPKQEGPRNISTCFSSGDIFAAHN	1	84.3274	185.71	84.327	_EGPRN (de) ISTCFSSGDIFAAHN (de) ISER	EGPRN (1) ISTCFSSGDIFAAHN (1) ISEFEGPRN (84.33) ISTCFSSGDIFAAHN (	5	3	890	1	1	1	1	
IPI00654069	43	AGDRVYIHPFHIIYHNKSTCAIENPSVETI	1	112.129	112.13	112.13	_YIHPFHIIYHN (de) K	YIHPFHIIYHN (1) K	12	3	561	1	1	1	1	
IPI00127100	102	TSSGPPRVYSIPGRENYSVDANGIQSQMIS	1	111.377	149.85	111.38	_VYSIPGREN (de) YSSVDAN (de) GIQSQM (ox) ISR	VYSIPGREN (1) YSSVDAN (1) GIQSQM (1) VYSIPGREN (111.38) YSSVDAN (111	9	3	930	1	1	1	1	
IPI00399798	395	MEIDWAVTAGAKISENGSSVAGIISSPNMEK	1	93.6706	164.94	115.87	_ISEN (de) GSSVAGIISSPNMEK (ox) EK	ISEN (1) GSSVAGIISSPNMEK	ISEN (93.67) GSSVAGIISSPN (-93.	4	3	646	1	1	1	1
IPI00131898	442	PMPDSCQWPEKMRFINISSTGIRVYKTCIPQ	1	93.0578	93.058	93.058	_FIN (de) ISSTGIR	FIN (93.06) ISSTGIR	3	2	555	1	1	1	1	
IPI00111960	140	PWCFPPSPYSYRIENISSTESGYTATITR	1	53.5041	271.64	53.504	_IEN (de) ISSTESGYTATITR	IEN (1) ISSTESGYTATITR	3	2	922	1	1	1	1	
IPI00338561	197	IETDMQIMVRIINKFNSSSSIEEKVAIFD	1	87.5658	87.566	87.566	_IIN (de) KFN (de) SSSSSIEEK	IIN (1) KFN (1) SSSSSIEEK	6	2	843	1	1	1	1	
IPI00856723	104	FRDFRPIDKSRFQIINFSSSEIKVSNIVNSI	1	136.299	136.3	136.3	_FQIIN (de) FSSSEIK	FQIIN (1) FSSSEIK	5	2	707	1	1	1	1	
IPI00137792	333	ESTPVNGFPFPPFKGNQSSQWLYEAMAKAW	1	148.027	148.03	148.03	_GN (de) QSSQWLYEAMAK (ox) AK	GN (1) QSSQWLYEAMAK	2	2	815	1	1	1	1	
IPI00876541	819	KSAINSEWEKIQQQSNQSSQFIHSVERFSQA	1	48.6226	111.34	48.623	_IIQQSN (de) QSSQFIHSVER	IIQQSN (1) QSSQFIHSVER	7	3	711	1	1	1	1	
IPI00677395	160	QAFPSINKEITGRINISQEGSTDVAVARTQ	1	60.9487	226.57	60.949	_EITGRIN (de) ISSQEGSTDVAVAR	EITGRIN (1) ISSQEGSTDVAVAR	7	3	712	1	1	1	1	
IPI00625835	124	IMGRYKYETTISPTSNISNSPFIENRNTQT	1	135.211	167.51	135.21	_YKYETTISPTSN (de) ISSN (de) SFICIEN (de) R	YKYETTISPTSN (1) ISSN (1) SFICIEN (1) YKYETTISPTSN (135.21) ISSN (135	12	3	943	1	1	1	1	
IPI00405742	451	VDINKKIQDIAISGNISSIYAMTDQKVFRI	1	282.718	282.72	282.72	_QDIAISGN (de) ISSIYAMTDQK	QDIAISGN (1) ISSIYAMTDQK	8	2	1036	1	1	1	1	
IPI00330594	132	SSCHKEVQIIVYQMDNVSIVQIIGSHIEDV	1	59.3587	176.9	59.359	_YQMDN (de) VSSIVQIIGSHIEDVN (de) ADLIQTK	YQMDN (1) VSSIVQIIGSHIEDVN (1) ADYVQMDN (59.36) VSSIVQIIGSHIEDVN	5	3	1050	1	1	1	1	
IPI00115976	715	APIEAYSGIVRHPGNFSSISCDYFAVNSQR	1	77.8708	126.07	77.871	_HPGN (de) FSSISCDYFAVN (de) QSR	HPGN (1) FSSISCDYFAVN (1) QSR	4	2	1094	1	1	1	1	
IPI00762812	814	HPIDIQEDFNATINVASSIIPKEAGSKETP	1	82.5933	82.593	82.593	_M (ox) SQHPIDIQEDFN (de) N (de) ATIVN (de) ASSIIPK	MSQHPIDIQEDFN (1) N (1) ATIVN (1) ASMSQHPIDIQEDFN (82.59) N (82.59)	19	3	968	1	1	1	1	
IPI00387282	281	NQHVPMESHIIQFVNWSSIIIPERYKSPYF	1	55.994	153.24	55.994	_AM (ox) IIN (de) QHVPM (ox) ESSHIIQFVN (de) WSSIIIPERYK	AM (1) QHVPMESHIIQFVN (1) WSSIIAM (55.99) QHVPMESHIIQFVN (	20	4	933	1	1	1	1	
IPI00123342	830	RRKWPERIASDNIINHSSIFIKGARIPEM	1	82.6513	227	82.651	_ISAIDN (de) IIN (de) HSSIFIK	ISAIDN (1) IIN (1) HSSIFIK	9	3	596	1	1	1	1	
IPI00119522	119	ITGSPVSNISAHIFSNISSEIKITIDFDRIA	1	129.082	135.3	129.08	_IQ (de) DIEITGSPVSN (de) ISAHIFSN (de) ISSIEK	IQDIEITGSPVSN (1) ISAHIFSN (1) ISIQDIEITGSPVSN (129.08) ISAHIFSN	21	3	968	1	1	1	1	
IPI00137987	123	GSHTFQGMFGCEITNNSRSGAVWRYAYDGED	1	54.3685	162.77	54.368	_DTTGSHTFQGM (ox) FGCEITN (de) N (de) R	DTTGSHTFQGMFGCEITN (1) N (1) R	19	3	764	1	1	1	1	
IPI00108844	84	SDTYSYIFRVCREANHSAGIVQINKSND	1	91.6567	182.15	91.657	_EASN (de) HSSGAGIVQIN (de) K	EASN (1) HSSGAGIVQIN (1) K	4	2	807	1	1	1	1	
IPI00315535	390	RCVRRNPSANTFHIHINASSFRIVPGHTPSEP	1	67.5869	151.44	117.67	_NPSANTFHIHIN (de) ASSFR	NPSANTFHIHIN (1) ASSFR	11	2	889	1	1	1	1	
IPI00742377	287	SDAQPHIQIKHVINGSGFADGFPYVQVI	1	90.3161	119.8	90.316	_HVVIN (de) GSSFGADGFPYVQVIK	HVVIN (1) GSSFGADGFPYVQVIK	5	2	1118	1	1	1	1	
IPI00122973	362	GVEPRPPTQVQFTINASSEHHRSPFCSAA	1	53.4444	70.994	53.444	_VVIISGVEPRPPTQVQFTIN (de) ASSEHHR	VVIISGVEPRPPTQVQFTIN (1) ASSEHHR	21	5	641	1	1	1	1	
IPI00120769	48	MTATKYFTNRIDVSNVSDTDQSCSTKAI	1	120.106	120.11	120.11	_IDVSN (de) VSSDTDQSCSTK	IDVSN (1) VSSDTDQSCSTK	6	2	1051	1	1	1	1	
IPI00330594	115	TEMQVAVIRDRDYENSSCHKEVQIIVYQMDN	1	88.9922	94.122	88.992	_IRDYEN (de) SSSCHKEVQIIVYQMDN	IRDYEN (1) SSSCHKEVQIIVYQMDN	7	3	779	1	1	1	1	
IPI00129041	57	IAGTPEHRCIRVPHTVNISSAWRNHSIPIETK	1	77.6441	129.77	77.644	_CIVPHTVN (de) ISSAWR	CIVPHTVN (1) ISSAWR	8	3	548	1	1	1	1	
IPI00123342	155	PQIQFSPPEEIVGMVINYRSIAEDFAEQPIK	1	232.541	244.91	232.54	_FQIQFSPPEEIVGMVIN (de) YSR	FQIQFSPPEEIVGMVIN (1) YSR	20	3	895	1	1	1	1	
IPI00463492	292	ARVIEKDFDTHYHNSRRIQEFIRAQEPG	1	80.3353	142.39	142.39	_VIENEKDFDTHYHN (de) ESR	VIENEKDFDTHYHN (1) ESR	14	2	1074	1	1	1	1	
IPI00405742	530	SREKSCVAITDAFPQMSRRAGQEVRSISVAP	1	61.1674	151.44	61.167	_SCVAITDAFPQN (de) M (ox) SRR	SCVAITDAFPQN (1) MSRR	12	3	624	1	1	1	1	
IPI00115976	727	HPGNFSSISCDYFAVNSQRIVCDIGNPMKA	1	77.8708	126.07	77.871	_HPGN (de) FSSISCDYFAVN (de) QSR	HPGN (1) FSSISCDYFAVN (1) QSR	16	2	1094	1	1	1	1	
IPI00113517	192	VGCIPIYTIIPPEHHVNGSRPCTGEGDTPRC	1	44.9151	60.645	44.915	_KGIVSGGVYN (de) SHVGCIPYTIIPPEHHVNGSRPCTGEGDTPR	KGIVSGGVYN (1) SHVGCIPYTIIPPEHHVNGSRPCTGEGDTPR	28	5	913	1	1	1	1	
IPI00226790	331	RKTYAVYDFIDTAMINNSRNINQIKWRP	1	170.113	188.41	170.11	_KTYAVYDFIDTAMIN (ox) IN (de) N (de) SR	KTYAVYDFIDTAMIN (1) N (1) SR	15	3	714	1	1	1	1	
IPI00121908	75	KIVPCFVGVIPIAENFSLINKEESIQR	1	73.296	145.46	73.296	_IVPCFVGVIPIAEN (de) FSR	IVPCFVGVIPIAEN (1) FSR	15	3	705	1	1	1	1	
IPI0022429	610	EFHQDNGPENGVYINISRGVNRFCISKPGV	1	134.465	134.47	134.47	_CAISHAITIEFHQDGN (de) GPEN (de) VGIYN (de) ISR	CAISHAITIEFHQDGN (1) GPEN (1) VGIYCAISHAITIEFHQDGN (134.47) GPEN	25	3	1039	1	1	1	1	
IPI00121190	528	EGCWGPEPRDCVSCQVNSRGRECVKCNIE	1	94.7673	99.752	94.767	_DCVSCQN (de) VSR	DCVSCQN (1) VSR	7	2	613	1	1	1	1	
IPI00119065	1500	AEAEQQAQAAIDKANASRQGVQANQETRE	1	94.0232	94.023	94.023	_AAQAAIDKAN (de) ASR	AAQAAIDKAN (1) ASR	9	2	609	1	1	1	1	
IPI00115516	456	PAPAPGRIEKEIIEGIANVSRREGGRMDIEE	1	96.8656	136.17	96.866	_IEKEIIEGIAN (de) VSR	IEKEIIEGIAN (1) VSR	10	3	482	1	1	1	1	
IPI00469123	58	GSTAIKCGPSRASGNFQVDFIHKERQI	1	72.8979	178.14	72.898	_ASGN (de) FSQVDFIHKER	ASGN (1) FSQVDFIHKER	4	3	679	1	1	1	1	
IPI00122973	243	QIFHSPDIAIRDYVNASQSIYSSPRVIGP	1	56.5333	202.18	56.533	_GVTSVSIQIFHSPDIAIRDYVNASQSIYSSPR	GVTSVSIQIFHSPDIAIRDYVNASQSIYSSPR	22	4	889	1	1	1	1	
IPI00114958	242	ECRGNIFMDINNKIANFSDQCTIYSGDDIVE	1	42.8061	156.41	42.806	_IAN (de) FSQCTIYSGDDIVEAIPKPCPGCPR	IAN (1) FSQCTIYSGDDIVEAIPKPCPGCPR	3	3	1085	1	1	1	1	
IPI00123428	75	IKSIDHIVGVRDNVSPKQEGPRNISTCF	1	59.8622	161.35	59.862	_SIDHIVGVRDN (de) VSPKQ	SIDHIVGVRDN (1) VSPKQ	14	3	691	1	1	1	1	
IPI00129526	62	EVQREEEAIIQIDGINSQIREIREKSEKFA	1	185.873	204.47	185.87	_TDDVEVQREEEAIIQIDGIN (de) ASQIR	TDDVEVQREEEAIIQIDGIN (1) ASQIR	19	3	910	1	1	1	1	
IPI00471089	75	VVSSVTTKAKGVAVTNTSQIGFRIDVADV	1	124.302	233.59	124.3	_GVAVTN (de) TSQIGFR	GVAVTN (1) TSQIGFR	6	2	676	1	1	1	1	
IPI00134585	754	IIFGACKMDREAIIGNASQIFDWSIKGASIS	1	76.5863	198.95	76.586	_M (ox) GDREAIIGN (de) ASQIFDWSIK	MGDREAIIGN (1) ASQIFDWSIK	9	3	719	1	1	1	1	
IPI00114044	93	NISESVEDPGRGSPGNASQGSIIHSPQAI	1	42.3222	100.28	42.322	_GSPGN (de) ASQGSIIHSPQAIQADPR	GSPGN (1) ASQGSIIHSPQAIQADPR	5	4	636	1	1	1	1	
IPI00320675	514	QKVVYIRWGEVDIIGNCSQFYPRDYKEMQ	1	62.2028	154.49	62.203	_WGEVDIIGN (de) CSQFYPRDYKEMQ	WGEVDIIGN (1) CSQFYPRDYKEMQ	9	3	881	1	1	1	1	
IPI00119522	520	QISSRDGSDSAAVYNSQEWGTRSSCGTIR	1	296.733	296.73	296.73	_DGSDSAAVYNSQEWGTR	DGSDSAAVYNSQEWGTR	11	2	1045	1	1	1	1	
IPI00322304	123	EIVTIGQCKVIATRYNSQDIISVNGYCTTS	1	120.33	120.33	120.33	_YSN (de) ESQDYSVN (de) GYN (de) CTTSSVSSAIR	YSN (1) ESQDYSVN (1) GYN (1) CTTSSVSSAIR	3	3	915	1	1	1	1	
IPI00462465	180	IEPKVFKPGSADAINDSQDFPFPETPAKVV	1	68.2915	192.27	68.291	_VFKPGSADAIN (de) DSQDFPFPETPAK	VFKPGSADAIN (1) DSQDFPFPETPAK	12	4	678	1	1	1	1	
IPI00987265	1627	DGPFTVFPVHADIIISNMSQDEIARIRAHRI	1	158.516	158.52	158.52	_DGPFTVFPVHADIIISN (de) M (ox) SQDEIAR	DGPFTVFPVHADIIISN (1) MSQDEIAR	17	3	912	1	1	1	1	
IPI00131143	268	QGTGIGFIYASGIGVNSQAKAIYVYTFGAI	1	150.984	196.78	150.98	_QGTGIGFIYASGIGVNSQAKAI	QGTGIGFIYASGIGVNSQAKAI	16	3	686	1	1	1	1	
IPI00130661	221	QRNYITAKDVGSGTTNNSQACAFIEQYFHN	1	69.4348	205.13	69.435	_DVSGGTTN (de) N (de) SQACAFIEQYFHN (de) SDITEFM (ox) R	DVSGGTTN (1) N (1) SQACAFIEQYFHN (1) DVSGGTTN (69.43) N (69.43) SQACA	8	3	1196	1	1	1	1	
IPI00108844	114	KDETIVGRINETHIFNGSNWIMIIYKGDDEY	0.999963	44.2704	162.46	162.46	_IN (de) ETHIFN (de) GSNWIM (ox) IYK	IN (1) ETHIFN (1) GSNWIM (1) IYK	8	3	738	1	1	1	1	
IPI00119063	3090	TDVTTQCSMRMHINGSNVQIHRGTISNP	1	69.8636	192.14	69.864	_M (ox) HIN (de) GSN (de) VQVJHR	MHIN (1) GSN (1) VQVJHR	4	3	508	1	1	1	1	
IPI00605187	757	PSARWEKEIHHIQEQVNSVNFIDKKEEFIGS	1	62.9993	186.82	62.999	_EIIHHIQEQN (de) VSN (de) VFIKKEEFIGSK	EIIHHIQEQN (1) VSN (1) VFIKKEEFIGSK	9	3	997	1	1	1	1	
IPI00114319	121	RTEAYFSIEGFPAEQNASNRAIHHVFEFSDIS	1	95.2051	201.37	95.205	_IEAYFSIEGFPAEQN (de) ASN (de) R	IEAYFSIEGFPAEQN (1) ASN (1) R	15	2	1073	1	1	1	1	
IPI00421157	318	SFTVQRGRKFIQKHINASNPSEPATIIFTAA	0.999996	53.9793	240.13	53.979	_HIN (de) ASNPSEPATIIFTAAR	HIN (1) ASNPSEPATIIFTAAR	3	2	1006	1	1	1	1	
IPI00114364	37	DPGSKVADRYAVYVNSNPRFRQGDYHIDV	0.999947	42.7281	122.42	42.728	_YAVYVN (de) SSNPR	YAVYVN (1) SSNPR	6	2	679	1	1			

IPI00187353	145 CEQANKIGAINSTISNESKEAFIDWARYDD	1	58.9802	140.63	58.98	_IGAIN (de) STISN (de) ESKEAFIDWAR	IGAIN (1) STISN (1) ESKEAFIDWAR	IGAIN (58.98) STISN (58.98) ESKE	10	3	775	1	1	1	1
IPI00322463	162 VPKFAIKDYRPSAGNNSIYQDVTVFKCIPH	1	71.3759	199.15	71.376	_DYRPSAGN (de) N (de) SIYQDVTVFK	DYRPSAGN (1) N (1) SIYQDVTVFK	DYRPSAGN (71.38) N (71.38) SIYQD	8	2	1089	1	1	1	1
IPI00848693	1320 FTRGVENDVFIYRPNNGSIVWGKVVDPVPI	1	58.2738	175.59	58.274	_YPN (de) N (de) GSIWNGK	YPN (1) N (1) GSIWNGK	YPN (58.27) N (58.27) GSIWNGK	4	2	619	1	1	1	1
IPI00652675	300 YGNVTCVANKIGVTNASIVIFRPGSVRGIN	1	207.921	207.92	207.92	_IGVTN (de) ASIVIFRPGSVR	IGVTN (1) ASIVIFRPGSVR	IGVTN (207.92) ASIVIFRPGSVR	5	2	894	1	1	1	1
IPI00134585	189 GDSVYRITMEFKGWINGSIVGFYKTYMEDG	1	138.936	194.24	138.94	_GWIN (de) GSIWGFYK	GWIN (1) GSIWGFYK	GWIN (138.94) GSIWGFYK	4	2	671	1	1	1	1
IPI00331318	233 KNIMAIKKFMVKFFNDSIVDPVDESEWGFYR	1	178.717	178.72	178.72	_FFN (de) DSIVDPVDESEWGFYR	FFN (1) DSIVDPVDESEWGFYR	FFN (178.72) DSIVDPVDESEWGFYR	3	2	1171	1	1	1	1
IPI00894972	696 RSRGIFPDGSHEISGNSTIPDKSIDFHFH	1	109.872	109.87	109.87	_GIFPDGSHEISGN (de) TSITPDK	GIFPDGSHEISGN (1) TSITPDK	GIFPDGSHEISGN (109.87) TSITPDK	13	3	692	1	1	1	1
IPI00123428	52 SATSFIEDIMDRYKNDSTITITQIKSIDHI	1	109.145	201.48	109.15	_YGNK (de) DSITITQIK	YGNK (1) DSITITQIK	YGNK (109.15) DSITITQIK	4	1	495	1	1	1	1
IPI01026704	1113 FSSNITIRGEIQSENSSITISSNRRKREIA	1	118.27	235.75	124.25	_GEIQSEN (de) SSITISSNRR	GEIQSEN (1) SSITISSNRR	GEIQSEN (118.27) SSITISSNRR (-11	7	3	604	1	1	1	1
IPI00321634	185 ETTERVFPYISVMVNGSISYDHSKDGWRSE	1	89.8461	232.15	89.846	_VFPYISVM (ox) VN (de) N (de) GSIYDHSKDGWR	89.846	VFPYISVM (89.85) N (89.85) GSI	11	4	652	1	1	1	1
IPI00830356	191 PGVQRVFPYISAMVNGSISYDHERDGRPTE	1	56.8514	136.2	56.851	_VFPYISAM (ox) VN (de) N (de) GSIYDHER	56.851	VFPYISAM (56.85) N (56.85) GSI	11	4	580	1	1	1	1
IPI00123194	271 IYRIGIGHNQIRMIENGSIIFPTIREIHD	1	96.2471	163.51	96.247	_M (ox) IEN (de) GSIISFIPTIR	96.247	MIEN (96.25) GSIISFIPTIR	4	2	798	1	1	1	1
IPI00856723	116 QIINFSSSEIKVSTNVSISDEGRYFCQIYT	1	128.951	133.47	128.95	_VSITN (de) VSISDEGR	VSITN (1) VSISDEGR	VSITN (128.95) VSISDEGR	5	2	689	1	1	1	1
IPI00309230	416 DECPGVGIVIPQSPGNESIRHHIEVMEIYR	1	109.059	149.41	109.06	_YGVIVDECPGVGIVIPQSPGN (de) ESIR	YGVIVDECPGVGIVIPQSPGN (1) ESIR	YGVIVDECPGVGIVIPQSPGN (109.0	22	2	1410	1	1	1	1
IPI00130117	855 EMPQVQDMVVSQKNCISQRNPCCIPIQ	1	76.0486	76.049	76.049	_ISPPGAE (ox) FQVQDM (ox) VVSQKGN (de) CSIQR	76.049	ISPPGAE (76.05) FQVQDM (76.05) VVSQKGN (76.05	22	4	758	1	1	1	1
IPI00112614	161 DFIVDNETFSGFIQHNSIIPRSTVDSIQAN	1	148.889	149.85	148.89	_IQDFIVDN (de) ETFSGFIQHN (de) ISIPR	148.89	IQDFIVDN (1) ETFSGFIQHN (1) ISIPR	18	3	898	1	1	1	1
IPI00115482	11 _____MEAHNVSAFPNFSIPPFGHRRATDA	1	73.9176	192.16	73.918	_M (ox) EAHN (de) VSAPFN (de) FSIPPPGHR	73.918	MEAHN (73.92) VSAPFN (73.92) FSI	11	3	777	1	1	1	1
IPI01026704	100 GRERSMPCVKIDIPVNTSIPNVEIKEMFT	1	111.643	168.41	111.64	_IDIPVN (de) TSIPN (de) VTEIK	111.64	IDIPVN (111.64) TSIPN (111.64) V	6	3	586	1	1	1	1
IPI00135560	245 IDMEFRGAFFPIKEDNWSIPNRAVEPQIEDD	0.999999	60.1786	128.22	128.22	_GAFPPKEDN (de) WSIPNR	128.22	GAFPPKEDN (60.18) WSIPN (-60.1	10	2	946	1	1	1	1
IPI00129485	176 FFHNEKSVRYHHYSSNFSIPKANSHSGDY	1	158.3	187.85	158.3	_YHYSSN (de) FSIIPK	158.3	YHYSSN (158.3) FSIIPK	7	3	494	1	1	1	1
IPI00138180	59 KRDWIWNQMHIDEKNESIPHYVGGIKSNVN	1	143.714	143.71	143.71	_DWIWN (de) QM (ox) HIDEKN (de) ESIPHYVGK	143.71	DWIWN (143.71) QMHIDEKN (143.7	14	3	963	1	1	1	1
IPI00108811	165 RVYTYADTPNDPQISNFSIPEEDTKIKPII	1	50.2553	180.63	50.255	_VYTYADTPN (de) DFQISN (de) FSIPEEDTKIK	50.255	VYTYADTPN (50.26) DFQISN (50.26	15	4	760	1	1	1	1
IPI00480532	48 FVGEGRVLIETIPANYSINSSKIKITVIPS	1	103.387	160.48	103.39	_VIETIPAN (de) YSIN (de) SSK	103.39	VIETIPAN (103.39) YSIN (103.39)	8	2	819	1	1	1	1
IPI00858152	129 YGNVTCVANSKIHTNASIMIFEVKTAAIP	1	129.537	129.54	129.54	_IGHN (de) ASIM (ox) IFEVK	129.54	IGHN (129.54) ASIMIFEVK	5	3	526	1	1	1	1
IPI00312711	577 SASGAEIEAIEAQVINISIKYFNVTPIIHMV	1	167.239	231.83	167.24	_ISASGAEIEAIEAQVIN (de) ISIK	167.24	ISASGAEIEAIEAQVIN (167.24) ISI	17	2	1079	1	1	1	1
IPI00123040	461 PKAPQHVHNIIPYTNVSIKMIITNPEGRKE	1	65.467	78.326	65.467	_APQHVVN (de) HIPPYTN (de) VSIK	65.467	APQHVVN (65.47) HIPPYTN (65.47)	14	3	673	1	1	1	1
IPI00469218	312 NMTIPDAIVPTFISINSHKAIQATVGNYSK	1	92.4736	100.39	92.474	_IN (de) M (ox) TIPDAIVPTFISIN (de) HSIK	92.474	IN (92.47) MTIPDAIVPTFISIN (92.	17	3	773	1	1	1	1
IPI00221706	234 KNYSEVCRNCKEAYKNISIIYSQMQKINGIE	1	68.9439	162.48	68.944	_EAYKN (de) ISIIYSQMQK (ox) QK	68.944	EAYKN (68.94) ISIIYSQMQK	5	2	917	1	1	1	1
IPI00317488	157 ERAACRIEYKGFEGFNYSIIVQHASSGANIK	1	60.7641	218.25	60.764	_FGFEGN (de) YSIIVQHASSGAN (de) K	60.764	FGFEGN (60.76) YSIIVQHASSGAN (6	6	3	710	1	1	1	1
IPI00323134	692 EPTIITDSGNPPKNSIIRVVKVQCDSNG	1	114.498	167.59	114.5	_SN (de) ISIIR	114.5	SN (114.5) ISIIR	2	2	402	1	1	1	1
IPI00108535	375 NSQSIQITERMTISQNSIIRIDPKREDAG	1	156.362	160.52	156.36	_M (ox) TISQN (de) N (de) SIIR	156.36	MTISQN (156.36) N (156.36) SIIR	6	2	648	1	1	1	1
IPI00123442	47 FIEFKWISYDQCHHNSIIPPTIEVCNRT	1	99.4091	99.409	99.409	_IYSDQCHHN (de) ISIIIPPTIEVCN (de) R	99.409	IYSDQCHHN (99.41) ISIIIPPTIEVC	9	3	922	1	1	1	1
IPI00115516	795 IIGGQAGIGRRIGAINNSIIEEDRIQOISI	1	93.4784	125.03	93.478	_RIGAIN (de) N (de) SIIIEEDR	93.478	RIGAIN (93.48) N (93.48) SIIIEED	6	3	567	1	1	1	1
IPI00406603	1049 IRGHNSPPFDRRIINHSIIHKSNETAISP	1	91.9373	158.05	91.937	_IIN (de) HSIIHK	91.937	IIN (91.94) HSIIHK	3	2	595	1	1	1	1
IPI00108535	104 NFTGQAYSGREIYSNGSIIFQMIMKDMGV	1	78.1909	269.49	78.191	_EIIYSN (de) GSIIFQMIMK	78.191	EIIYSN (78.19) GSIIFQMIMK	6	3	675	1	1	1	1
IPI00130486	397 CSVISKGGYIKVHYNASIIDGTIIDSTWNI	1	101.423	135.09	101.423	_YHYN (de) ASIIDGTIIDSTWNI	101.423	YHYN (101.42) ASIIDGTIIDSTWNI (-	4	3	795	1	1	1	1
IPI00330481	171 QVQVMKAVGVSYTTNVSIIAPRSEHIVNFT	1	157.233	179.14	157.23	_AVVGSYTTN (de) VSIIAPR	157.23	AVVGSYTTN (157.23) VSIIAPR	10	3	584	1	1	1	1
IPI00808345	114 MEEMIRNKSSECKAINDSIHYINREQRNCR	1	107.37	162.68	107.37	_AIN (de) DSIHYINR	107.37	AIN (107.37) DSIHYINR (-107.37) R	3	2	659	1	1	1	1
IPI00116945	124 PDSIEDDIIFKISQNASIGPHVRPIPIQYE	1	65.2717	95.409	65.272	_ISQN (de) ASIGPHVRPIPIQYEDKEVEPGTICD	65.272	ISQN (65.27) ASIGPHVRPIPIQYEDK	4	4	1139	1	1	1	1
IPI00314673	131 ECRRCVVNGHRIRNNSIGGVINIKYDVIIR	1	122.955	165.58	122.955	_IRN (de) SSIIGGVINK	122.955	IRN (122.95) SSIIGGVINK (-122.95)	3	2	630	1	1	1	1
IPI00405543	141 SKHFAKIEIVPIIYDNDISFVQDKSVYTPQ	1	63.337	173.28	63.337	_IEIVPIIYDN (de) DSIFVQDK	63.337	IEIVPIIYDN (63.34) DSIFVQDK	10	3	742	1	1	1	1
IPI00459432	228 VCQIEVAIVGASPRGNHSIFGEVATIGQGP	1	117.404	236.38	117.404	_GN (de) HSIFGEVATIGQGPCDPCSVNER	117.404	GN (117.4) HSIFGEVATIGQGPCDPC	2	3	886	1	1	1	1
IPI00130754	139 IEFKHYDYITSTNSGIEGIEINREGGVCR	1	67.1895	129.46	67.1895	_KYHYDYITSTN (de) GIEGIEINR	67.1895	KYHYDYITSTN (67.19) GIEGIEINR	12	3	817	1	1	1	1
IPI00621027	969 HAEISFVITDGVGTGNDIEEVSIMRQNV	1	50.202	175.773	50.202	_HAEISFVITDGVGTGN (de) DSIEEVSIMRQNV	50.202	HAEISFVITDGVGTGN (50.2) DSIEE	16	4	749	1	1	1	1
IPI00856861	382 DDQKQAFRAVYEAIRNCSIEDDSVRSIIKPI	1	123.079	123.08	123.08	_AVYEAIRN (de) CSIEDDSVR	123.08	AVYEAIRN (123.08) CSIEDDSVR	8	2	999	1	1	1	1
IPI00221669	598 NSIWNIEEHNPKIPNISIDVIQSPFPEII	1	37.2277	65.425	37.228	_IPN (de) ISIDVIQSPFPEIIIESHM (ox) VM (ox) IR	37.228	IPN (37.23) ISIDVIQSPFPEIIIESH	3	4	757	1	1	1	1
IPI00115976	612 ESEFRDKISPIHAIINFSIDPKAPMDSHGIR	1	62.1618	124.51	62.162	_ISPIHAIIN (de) FSIIDPK	62.162	ISPIHAIIN (62.16) FSIIDPK	9	3	556	1	1	1	1
IPI00127407	198 FYTKIFINPEKREQINISIDHRCRIFQINDG	1	68.5357	95.094	68.536	_EQIN (de) ISIDHR	68.536	EQIN (68.54) ISIDHR	4	2	613	1	1	1	1
IPI00411145	1467 IEASRIDGSCRKVINNSIDEPRAIIVFPPK	1	79.492	93.345	79.492	_KVIN (de) N (de) SDEPR	79.492	KVIN (79.49) N (79.49) SDEPR	5	2	700	1	1	1	1
IPI00315535	103 RFDAAAGTSVHGVPQNGSICAHIPMIKESVE	1	67.8637	131.33	67.864	_FDAAGTSVHGVPQNG (de) GSICAHIPM (ox) IK	67.864	FDAAGTSVHGVPQNG (67.86) GSICAH	15	3	894	1	1	1	1
IPI00115599	162 VYVMSTAIPMIKQSNNGSIAVSSIAAGMTQ	1	55.8644	176.21	55.864	_QSN (de) GSIAVSSIAAGK	55.864	QSN (55.86) GSIAVSSIAAGK	3	2	717	1	1	1	1
IPI00121627	295 YFNDYWNKQDYYPINESIASIRVVSFCPI	1	95.5698	211.57	95.57	_DYYPIN (de) ESIAVIPR	95.57	DYYPIN (95.57) ESIAVIPR	6	2	876	1	1	1	1
IPI00123196	257 ISKIGISFNSITVMENGSIANVPHIREIHD	1	54.15	172.57	54.15	_IGISFN (de) SITVM (ox) EN (de) GSIAN (de) VPHIR	54.15	IGISFN (1) SITVMEN (1) GSIAN (1) VPH	13	3	830	1	1	1	1
IPI00116913	2211 GINASSAAWARIHRINASTADIQSKIRSPPG	1	85.5541	128.95	85.554	_IN (de) ASIADIQSK	85.554	IN (85.55) ASIADIQSK	2	2	581	1	1	1	1
IPI00850413	558 SSTDISIKIHVAQPENDSHVAIKMYSDDC	1	49.3332	210.14	49.333	_IHVAQPEN (de) DSHVAIIK	49.333	IHVAQPEN (49.33) DSHVAIIK	8	4	444	1	1	1	1
IPI00467180	88 SGMLNVKWRDRIAPASNSVHTVIRPIKAGYF	1	133.862	239.58	133.86	_IAPASN (de) VSHTVIRPIK	133.86	IAPASN (133.86) VSHTVIRPIK	6	2	902	1	1	1	1
IPI00133365	212 RGHAAIAIVNHDNSYNSHRIDHISFGEIYP	1	76.3411	140.22	76.341	_GHAHAAIAIVN (de) HDSYN (de) FSHR	76.341	GHAHAAIAIVN (76.34) HDSYN (76.34	15	3	717	1	1	1	1
IPI00318595	403 YFFGKCFNAMEVDAINSSHPVSTPVENPAQIR	1	67.4923	218.44	67.492	_CFNAMEVDAIN (de) SSSHPVSTPVENPAQIR	67.492	CFNAMEVDAIN (1) SSSHPVSTPVENPAQIR	11	3	1001	1	1	1	1
IPI00331032	113 QSTIDCVDPISIIAANRSHIPISPECHGWY	1	131.329	142.23	131.33	_YEVDMN (de) QSTIDCVDPISIIAAN (de) R	131.33	YEVDMN (131.33) QSTIDCVDPISIIA	22	2	1328	1	1	1	1
IPI00108811	289 HQRDIFSRDIPGAIANSNDHVKIIMIDDQRI	1	79.6139	198.16	79.614	_DIGPAIAN (de) SSSHDVK	79.614	DIGPAIAN (79.61) SSSHDVK	6	2	713	1	1	1	1
IPI00223446	574 DGAKNEIQKISNINSIHDIVQEATHAYN	0.734619	4.42192	125	125	_ISN (de) ISN (de) ISHDIVQEATHAYN	125	ISN (0.265) ISN (0.735) ISHDIVQEATHAYN (-4.42) ISN (4.42) ISHDIVQEATHAYN	8	3	1171	1	1	1	1
IPI00128260	143 SMNPDGVEVAAAQPNMSGYIVGRNANGVD	1	80.9745	238.7	80.9745	_IHIIPSM (ox) NPDGVEVAAAQPN (de) M (ox) SGYIVGR	80.9745	IHIIPSM (80.97) NPDGVEVAAAQPN (80.97) M (80.97) SGYIVGR	21	3	1031	1	1	1	1
IPI00408495	160 SVQEVNSKTQITCSINSSGDVIGHRWRRGG	1	91.4746	234.38	91.475	_TQ (de) ITCSIN (de) SSGVDIVGHR	91.475	TQITCSIN (91.47) SSGVDIVGHR	8	2	973	1	1	1	1
IPI00331550	325 QRIMGIRALAGIVYNSGTEPCYDIYR	1	93.4953	264.23	93.495	_AIAGIVYN (de) SSGTEPCYDIYR	93.495	AIAGIVYN (93.5) SSGTEPCYDIYR	8	3	751	1	1	1	1
IPI00222429	210 NSNANAAGPIVAGYNSVSGRSDGEPKMGV	1	83.8668	145.61	83.867	_VYNSNAN (de) AAGPIVAGYNS (de) VSGSVR	83.867	VYNSNAN (83.87) AAGPIVAGYNS (83.87) VSGSVR	12	2	1167	1	1	1	1
IPI00757771	283 WIRKKEGVFEEISNSSGRFFITNKENYTE	1	97.9042	123.76	97.904	_KKEN (de) GVFEIISN (de) SSGR	97.904	KKEN (97.9) GVFEIISN (97.9) SSGR	18	2	892	1	1	1	1
IPI00121550	158 RGERKRCRFDIWTGNCSGINDSYGYREGK	1	151.626	221.79	151.63	_IDWIGN (de) CSGIN (de) DDSYGYR	151.63</								

IPI00416285	449	G1ETPKKIRVYGGIVNQSEINEGTAFFRVQE	1	76.7324	211.09	159.4	_YVGGIVN (de) QSEINEGTAFFR	YVGGIVN (76.73) QSEIN (-76.73) E	7	3	701	1	1	1	1
IPI00132474	520	DEVNSEMDAYCRKNSESEICSNNGECVCGQ	0.999965	44.4959	238.68	238.68	_KEN (de) SSEICSN (de) GECVCGCVCR	KEN (1) SSEICSN (0.019) N (0.981) GKEN (44.5) SSEICSN (-17.17) N (17	1	3	884	1	1	1	1
IPI00855103	391	KIASHPAEQFTSKIGNFSEIATHNQTFIKKI	1	69.9345	199.37	69.935	_IGN (de) FSEIATHN (de) QTFIKKI	IGN (69.93) FSEIATHN (69.93) QTF	3	2	976	1	1	1	1
IPI00115626	171	RRPHFISVCDPDSQINCSSEGYIQNYRCRGED	1	91.7527	161.02	161.02	_IRPHFISVCDPDSQIN (de) CSEGYIQNYR	IRPHFISVCDPDSQIN (1) CSEGYIQNYR	17	3	1106	1	1	1	1
IPI00127352	233	PIITGTIKKEDSCQINYSSEGPCIGMQRERY	1	118.719	195.96	118.72	_KEDSCQIN (de) YSEGPCIGM (ox) QER	KEDSCQIN (1) YSEGPCIGMQR	8	3	807	1	1	1	1
IPI00458003	594	IQNTPGIEEQANQRINIISEGEVAATYKANYP	1	137.456	137.46	137.46	_IN (de) ISEGEVAATVK	IN (1) ISEGEVAATVK	2	2	666	1	1	1	1
IPI00114236	71	MDQNSDQWQDGVYINSSEGAVGRSIPQIYR	0.999998	56.7574	143.31	143.31	_YM (ox) DQNSDQWQDGVYIN (de) SSEGAVGR	YMDQN (-56.76) SDGWQDGVYIN (56	17	3	908	1	1	1	1
IPI00459432	133	SSAIVFTRIIEFDSTNASEGAPPGKPYPPY	1	55.2471	162.83	55.247	_IIEFDSTN (de) ASEGAQPPKPYPPYIAK	IIEFDSTN (1) ASEGAQPPKPYPPYIAK	8	4	720	1	1	1	1
IPI00987265	607	SKGRVITMANQVITVNIIEEGRIGIEPEGIP	1	94.5693	159.69	94.569	_VITM (ox) AN (de) QVITVN (de) ISEEGR	VITMAN (1) QVITVN (1) ISEEGR	12	3	665	1	1	1	1
IPI00135560	64	ITIPDVYGAAGHFYVNIISDVRVTOIHIISSE	1	109.599	109.6	109.6	_GHFYVN (de) ISDVR	GHFYVN (1) ISDVR	6	2	686	1	1	1	1
IPI00310049	72	TAEIFIEKKKEVHFVNASDVSVAHAHNSR	1	77.2224	138.91	77.222	_EVHFFVN (de) ASDVDSVK	EVHFFVN (77.22) ASDVDSVK	7	2	847	1	1	1	1
IPI00469218	116	KNTTRYSVQHMVFTYNIISDTEHFFNAISKEI	1	74.9528	170.14	74.953	_YSVQHM (ox) YFTYN (de) ISDTEHFFN (de) AISK	YSVQHMVFTYN (1) ISDTEHFFN (1) AIS	11	3	971	1	1	1	1
IPI00222967	115	KEASHYSIHDIVISYNTSDTVFPGAVAKVG	1	39.2149	222.48	39.215	_EASHYSIHDIVISYN (de) TSDTVFPGAVAK	EASHYSIHDIVISYN (1) TSDTVFPGAV	15	3	1004	1	1	1	1
IPI00312711	244	QDVTINGDFIVRYDYNRSDDSGSIIIEEGYF	1	124.278	162.47	162.47	_YDYN (de) RSDSGSIIIEEGYFVHFAPENIPTM (ox) SK	YDYN (1) RSDSGSIIIEEGYFVHFAPEN	4	4	936	1	1	1	1
IPI00719927	144	SENSPIGHSVIQVKANDSQGANAEIDYTFH	1	109.497	109.5	109.5	_AN (de) DSDQGAN (de) AEIDYTFHQAPEVVR	AN (1) DSDQGAN (1) AEIDYTFHQAPEV	2	3	936	1	1	1	1
IPI00136925	70	VERNIRIVVPINNREINISDPTSPIRNRFVYH	1	86.7722	196.71	86.772	_EN (de) ISDPTSPIRR	EN (86.77) ISDPTSPIRR	2	2	693	1	1	1	1
IPI00116105	320	IQDVIADVGIKIDFTNQSDFADTKDPTITI	1	105.627	188.39	105.63	_FSM (ox) SDTYDIQDVIADVGIKIDFTN (de) QSDFADTK	FSMSDTYDIQDVIADVGIKIDFTN (1) QSI	24	4	930	1	1	1	1
IPI01026704	341	EIKSIASEPTKHFNFVSDIAIIVTVKRAIG	1	146.296	179.74	146.3	_HFFN (de) VSDIEAIIVTVK	HFFN (1) VSDIEAIIVTVK	4	2	917	1	1	1	1
IPI00309249	490	SINVSASAQKPIYINCSCTVGGASAKTGS	1	183.598	183.6	183.6	_QPIYIN (de) CSCVTVGGASAK	QPIYIN (1) CSCVTVGGASAK	6	2	957	1	1	1	1
IPI00119063	2503	GGCQDICIITHQGHVNSCRGGRIIQEDFTC	1	88.9277	106.49	104.06	_INN (de) GGCQDICIITHQGHVN (de) CCSR	INN (0.115) N (0.885) GGCQDICIITHQ	19	3	906	1	1	1	1
IPI00122592	79	PVRIKEQVVIQAQNCSCSKGGSIPIPPI	1	88.9922	195.46	88.992	_IKEQVVIQAQ (de) N (de) CSCESK	IKEQVVIQAQ (1) N (1) N (1) CSCESK	13	3	727	1	1	1	1
IPI00308990	180	KPGIKVISAIAQHSINFSECEQVVPFPAISTI	1	119.557	119.56	119.56	_YISIAQHSIN (de) FSCCEQVR	YISIAQHSIN (1) FSCCEQVR	11	3	687	1	1	1	1
IPI00310059	170	KRENAPSKKSIKCKTNQSCIVIDSTEKVPN	1	128.738	162.43	128.74	_TN (de) QSCIVIDSTEK	TN (128.74) QSCIVIDSTEK	2	2	813	1	1	1	1
IPI00135560	143	QIQISQDSSGRKIVSNVSEASVSKMNAFQ	1	69.6016	101.2	69.602	_YSN (de) VSCEASVSK	YSN (69.6) VSCEASVSK	3	2	634	1	1	1	1
IPI00123196	298	IAQHXYIVVYIHNNTISAVGQDFCRAGHP	1	54.2531	94.45	54.253	_YIQVVIYHN (de) N (de) N (de) ISAVGQN (de) DFCR	YIQVVIYHN (1) N (1) N (1) ISAVGQN (1)	11	3	877	1	1	1	1
IPI00130420	357	PGVFAQSKPDSAEVNSAVCAFPKIYVND	1	84.9425	146.76	84.942	_QIGASPSDDIIFGVPAGSKPDSAEVNVN (de) R	QIGASPSDDIIFGVPAGSKPDSAEVNVN (1)	27	3	983	1	1	1	1
IPI00469426	390	VFKTNSQVSDVRAMNISASSMTITKSNVD	1	149.298	149.3	149.3	_AM (ox) N (de) ISASSM (ox) TITWK	AMN (1) ISASSMTITWK	3	2	787	1	1	1	1
IPI00894970	244	KGNVANKWISSEFINKISASAREPPSENGTS	1	65.4716	108.58	65.472	_ISEEFIKN (de) ISASAR	ISEEFIKN (1) ISASAR	8	2	783	1	1	1	1
IPI00120761	660	TYTKISVDPGKIVSNSSARGWVHPHIGIYR	1	146.959	162.37	146.96	_ISVDPGKIVSN (de) SSAR	ISVDPGKIVSN (1) SSAR	11	2	766	1	1	1	1
IPI00848693	951	ERIDCYPDEHGASEANCSARGCIWEASNTTR	1	66.9649	147.17	66.965	_IDCYPDEHGASEAN (de) CSAR	IDCYPDEHGASEAN (1) CSAR	14	3	685	1	1	1	1
IPI00114958	82	GSPTYFSPKYIIEKGNCSAQSGIAWQCDKCF	1	83.8336	112.82	83.834	_EGN (de) CSAQSGIAWQCDKCFDAEEAATGECTATVGR	EGN (1) CSAQSGIAWQCDKCFDAEEAATG	3	4	956	1	1	1	1
IPI00126769	345	ETEDDYGYGHVQTCNFSAQMAKVIINDSYE	1	114.068	139.04	139.04	_NIGIETEDDYGYGHVQTCN (de) FSAQM (ox) AK	NIGIETEDDYGYGHVQTCN (1) FSAQM/N	21	3	1051	1	1	1	1
IPI00330594	255	DISSQTQGFQHSMDNISAQIQTVRDGMERA	1	86.5994	175.59	175.59	_GSIQSANISSQTQGFQHSMDN (de) ISAQIQTVR	GSIQSANISSQTQGFQHSMDN (1) ISAQI	23	3	1160	1	1	1	1
IPI00137491	118	NIPWYIAGNHDHIGNVSAQIAYSISKRWN	0.999999	61.8707	173.18	74.364	_NIPWYIAGN (de) HDHIGN (de) VSAQIAYS	NIPWYIAGN (1) HDHIGN (1) VSAQIAYS	16	3	924	1	1	1	1
IPI00553503	326	QRRIFNIYKMDFIIFNYSAPSYIRI	1	60.5499	162.29	60.55	_M (ox) DFIIFN (de) YSAPSYIR	MDFIIFN (60.55) YSAPSYIR	7	3	619	1	1	1	1
IPI00115482	5	MEAHNVSAFPNFIIPPGFGR	1	73.9176	192.16	73.918	_M (ox) EAHN (de) VSAPFN (de) FSIIPPGFGR	MEAHN (1) VSAPFN (1) FSIIPPGFGR	5	3	777	1	1	1	1
IPI00405437	430	KTERTEVLIQCTVSPNASAPDAWVEDYEFK	1	57.1445	106.11	57.145	_TEVLIQCTVSPN (de) ASAPDAWVEDYEFK	TEVLIQCTVSPN (1) ASAPDAWVEDYEFK	12	3	956	1	1	1	1
IPI00330632	1385	AKVVVDCKEVGQKAINASANTISDGVVEVIGR	1	103.17	207.76	103.17	_AIN (de) ASAN (de) ITSDGVVEVIGR	AIN (1) ASAN (1) ITSDGVVEVIGR	3	2	895	1	1	1	1
IPI00230718	276	GAGEVSPAHESSKPTNISAKFKSYFPMGNF	1	75.376	194.27	75.376	_GAGEVSPAHESSKPTN (de) ISAK	GAGEVSPAHESSKPTN (1) ISAK	16	3	657	1	1	1	1
IPI00877197	518	NKRDAITAVRKMRAINGSALYTGSSIDFVRN	1	76.3411	198.85	76.341	_AIN (de) GSAIYTGSSIDFVR	AIN (1) GSAIYTGSSIDFVR	3	3	591	1	1	1	1
IPI00453977	437	RVQGGSSVWGSVITHNSSAITYQSWGRS	1	55.8436	126.86	55.844	_VQGGSSVWGSVITHN (de) SSAIYQSWGR	VQGGSSVWGSVITHN (1) SSAIYQSWGR	15	4	692	1	1	1	1
IPI00131830	270	DEETSCSVIEIKYTGNASAIIPDQGRMQ	1	83.6916	185.27	83.692	_YTG (de) ASAIIPDQ (de) GR	YTG (1) ASAIIPDQGR	4	4	564	1	1	1	1
IPI00135635	269	DEEISCSVIEIKYTGNASAIIPDQGRMQ	1	81.3173	133.48	81.317	_YTG (de) ASAIIPDQGR	YTG (1) ASAIIPDQGR	4	2	862	1	1	1	1
IPI00116913	2570	VVQRGLAAGARQIINANSALIEETIIGHQGR	1	62.8132	205.98	62.813	_QIIAN (de) SSAIIEETIIGHQGR	QIIAN (62.81) SSAIIEETIIGHQGR	5	3	680	1	1	1	1
IPI00421237	134	QEIKITISDVQKFAEINGSALCSYNIKPEYIT	0.999949	42.9647	70.094	70.094	_FAEIN (de) GSAICSYNIKPEYITISK	FAEIN (42.96) GSAICSYN (-42.96)	5	4	674	1	1	1	1
IPI00119522	111	IPRIQDIEITGSPVSNISAHIFSNISSEIEKI	1	129.082	164.79	129.08	_IQ (de) DIEITGSPVSN (de) ISAHIFSN (de) ISSIEK	IQDIEITGSPVSN (1) ISAHIFSN (1) IS	13	3	968	1	1	1	1
IPI00109996	110	EQWFRVNRITRITIGYVNSAGGTHIQWMYGC	1	45.9408	194.97	45.941	_TIIGYV (de) Q (de) SAGGTHIQ (de) WM (ox) YCGDVS	TIIGYV (1) QSAGGTHIQWMYGC (45.94) QSAGGTHIQWMYG	7	3	1076	1	1	1	1
IPI00985828	124	EQSFRVDIRTAIRYVNSAGGSHIQWMAQ	1	38.9328	214.14	38.933	_YVNSAGGSHIQWMAQ (de) AGCDVESDGR	YVNSAGGSHIQWMAQ (1) AGCDVESDGR	3	4	702	1	1	1	1
IPI00123342	931	PRPKDKNGTRAEPINASAGDQEEKVIPPAG	1	112.549	112.55	112.55	_DKN (de) GTRAEPIN (de) ASAGDQEEK	DKN (1) GTRAEPIN (1) ASAGDQEEK	12	2	1115	1	1	1	1
IPI00115458	160	MIKAINRGNVYQAGNHSFAWGMTIDEGIR	1	81.8069	185.61	81.807	_GN (de) YGWQAGN (de) HSAFWGM (ox) TIDEGIR	GN (1) YGWQAGN (1) HSAFWGM (81.81) YGWQAGN (81.81) HSAFW	9	3	862	1	1	1	1
IPI00331214	320	QNPDNHCFCTEKVINSNCTSYGVIDIGKCKE	1	112.299	161.82	112.3	_YVSN (de) N (de) CTSYGVIDIGK	YVSN (112.3) N (1) CTSYGVIDIGK	4	2	871	1	1	1	1
IPI00515360	904	GTCRCRKNVGRICNECSDGSHISKQNP	1	93.4937	93.494	93.494	_ICN (de) ECSDGSHISK	ICN (93.49) ECSDGSHISK	3	2	828	1	1	1	1
IPI00119063	1768	PEKSIYIWSGNHTINRCNIDGSEIEVDTM	1	101.431	101.43	101.43	_IYWISSGN (1) HTIN (1) R	IYWISSGN (101.43) HTIN (101.43)	12	2	782	1	1	1	1
IPI00330833	733	RVARVTIGPICRAFNECCTIANKRKESPH	1	122.913	228.12	122.912	_AFN (de) ECCTIANK	AFN (122.91) ECCTIAN (-122.91) K	3	2	665	1	1	1	1
IPI00108003	478	KVIITQSQIPITGIRKHNMTYFCKTHNSVGNSS	1	61.1666	76.713	61.167	_VIITQSQIPITGIRKHN (de) M (ox) TYFCK	VIITQSQIPITGIRKHN (1) MTYFCK	15	3	837	1	1	1	1
IPI00127238	411	AGQISQKQETIVTIFDNRVWRQGLVEDIEIP	1	113.629	113.63	113.63	_ETIVTIFDN (de) R	ETIVTIFDN (113.63) R	9	2	605	1	1	1	1
IPI00762609	112	ERTVRKIRVYVGNINNETWSRIAFTEHERRR	0.5	0	183.89	183.89	_YVGNIN (de) NETWSR	YVGNIN (0.5) N (0.5) ETWSR	8	2	791	1	1	1	1
IPI00653675	307	RYHGDPISCAKKINANSTWQPKAKYVFKDV	1	129.772	129.77	129.77	_ITAN (de) STWQ (de) PDKAK	ITAN (129.77) STWQPKAK	4	2	731	1	1	1	1
IPI00625262	83	TIILIFDGEPCDQSNITWFKSADCYNEIY	1	159.345	159.34	159.34	_FDGEPDQSN (1) ITWFK	FDGEPDQSN (1) ITWFK	11	3	691	1	1	1	1
IPI00742385	66	REKIEEHGSMRAFVENITVENSIVFKPHII	1	87.1601	339.57	87.16	_AFVEN (de) ITVIEN (de) SIVFK	AFVEN (87.16) ITVIEN (87.16) SIV	5	2	913	1	1	1	1
IPI00111385	169	RFGNKSAPSETIREVNIITVIDRDK	1	133.069	133.07	133.07	_EVN (de) ITVIDRDK	EVN (133.07) ITVIDRDK	3	2	594	1	1	1	1
IPI00323624	939	GVKKTIKVPEGMRIKNTVAIHTIDPEKIGQ	1	61.7674	110.55	61.767	_IN (de) KTVAIHTIDPEKIGQGGVQK	IN (61.77) KTVAIHTIDPEKIGQGGVQ	2	3	783	1	1	1	1
IPI00461861	285	SIEMNKVMEIEKEIANATKPEDRNDPMIY	1	118.547	118.55	118.55	_VM (ox) EIEKEIAN (de) ATTKPEDR	VMEIEKEIAN (1) ATTKPEDR	10	3	698	1	1	1	1
IPI00403586	270	YFKGNDYFVEAMIVNHNSTIDVRAAARAR	1	85.1951	125.88	85.195	_GNVDFVEAM (ox) IVN (de) N (de) HTSIDVER	GN (-74.97) YDFVEAMIVN (74.97) N	13	3	814	1	1	1	1
IPI00121776	51	GVSSISKDYCMYNNWTRIPSSIENATSIS	0.992587	18.2576	162.93	79.633	_DYCM (ox) YVNS (de) NN (de) WTR	DYCMYVNS (0.504) N (0.504) N (0.993) DYCMYVNS (0) N (0) N (18.26) WTR	9	2	859	1	1	1	1
IPI00115892	119	DNMIIIGPVKNVTKYGNMTQDQVHMIITRSQ	1	74.8534	89.624	74.853	_YGN (de) M (ox) TQDQVHMIITR	YGN (74.85) MTQDQVHMIITR	3	3	617	1	1	1	1
IPI00459432	157	GKPYPPYSIAKFSWNNITNSIDIANISADFQ	0.561979	0	47.044	47.044	_FSWN (de) NITN (de) SIDIANISADFQRPVDDPTGAFAN (de) GSITFK	FSWN (0.562) N (0.562) ITN (0.45) SIFSWN (0) N (0) ITN (0) SIDIAN (0) IS	5	4	1052	1	1	1	1
IPI00125497	600	VITAEKPVGDISSPNETKYIISIDQDSVVK	1	124.633	134.63	124.63	_YSVITAEKPVGDISSPN (de) ETK	YSVITAEKPVGDISSPN (1) ETK	18	3	750	1	1	1	1
IPI00405742	1053	AIERTVVEGMEYVFNITKVFISPAVPEEP	1	83.3699	136.48	83.37	_VTVEGM (ox) EYVFN (de) DTK	VTVEGMEYVFN (83.37) DTK	12	2	906	1	1	1	1
IPI00272381	113	IENIILKMDSDGFIENITIQRYFPNDEDQV	1												

IPI00308971	1532	GHI	FD	ISS	ISGRAGINASYSEK	IVFMSICE	1	90.827	90.827	90.827	_AGIN (de) ASYSEK	AGIN (90.83) ASYSEK	4	2	521	1	1	1		
IPI00224752	427	STGN	VTNE	IRVPH	LHNESWV	ITPKAKQDYA	1	84.4684	232.5	84.468	_VFHHN (de) ESWV IITPK	VFHHN (84.47) ESWV IITPK	6	3	608	1	1	1		
IPI00396840	538	TAVP	DIYFENAMRFFNF	SWRVTADQ	LRKAPN		1	130.272	130.27	130.27	_FFN (de) FSWR	FFN (130.27) FSWR	3	2	503	1	1	1		
IPI00230084	56	WIQD	IG	IRED	NEGVYNGS	WGGRGVITTYCP	0.996001	23.9634	121.02	121.02	_M (ox) STI I IHHQP	YAWIQDIG IREDN (0.004) MSTI I IHHQP	28	4	983	1	1	1		
IPI00464256	239	IERY	WISSRAAAIKV	NDSPVPH	IWNSTERS		1	125.728	125.73	125.73	_AAAIKVN (de) DSVPFH	IWN (1) STER	7	3	772	1	1	1		
IPI00338785	1384	ITKY	FQMSIEAEKRV	NASTTD	PNSTVEQSAI		1	139.109	139.11	139.11	_VN (de) ASTTDPN (de) STVEQSAITR	VN (139.11) ASTTDPN (139.11) STV	2	2	997	1	1	1		
IPI00331032	97	EASF	ISQCMKYEDV	NQSTID	CVDPISSIAA		1	154.602	154.6	154.6	_YEVDWN (de) QSTID	CVDPISSIAAN (1) R	6	3	886	1	1	1		
IPI00129168	4						1	80.3118	82.543	82.543	_MAIN (de) SSTDG	IK	4	2	634	1	1	1		
IPI00469426	549	IPRGP	DGTG	EGISSTV	NGSDTPS	AVTDIRV	1	246.773	246.77	246.77	_GPDGTEG	ISSTVN (de) GSTDPS	AVTDIR	13	2	1218	1	1	1	
IPI00469218	283	KVEN	KNAIEIQ	GMNASS	IFFIQ	GVRINM	1	71.5582	202.03	71.558	_AIEIQGMN (ox) N (de) ASSS	IFFIQGVR	9	3	778	1	1	1		
IPI00122973	47	HPRE	AFIPQ	GGSVQV	NCSSSCKED	ISIGIET	1	162.09	162.09	162.09	_EAFIPQ	GGSVQVN (de) CSSSCK	13	2	1028	1	1	1		
IPI00223987	215	AIQD	TRD	LIHST	GHNISRV	TMSAVSSQEK	1	88.0206	139.48	88.02	_DIIHSTGHN (de) ISR	DIIHSTGHN (88.02) ISR	10	3	489	1	1	1		
IPI00135686	148	YGP	GW	SMANAG	KDNGSQ	FFITVKT	1	133.66	133.66	133.66	_DTN (de) GSQFF	ITTVK	3	2	730	1	1	1		
IPI00134743	430	YGN	PGYK	VVDGEREN	VSMVDY	AHNNYQAQSAVPIR	1	66.9694	110.06	66.969	_VVDGEREN (de) VSM (ox) VDY	AHNNYQAQSAVPIR	8	3	1060	1	1	1		
IPI00128178	147	ISNS	KAD	IDT	ERFQ	NFSMATDQR	1	106.492	106.49	106.49	_FQN (de) FSM (ox) ATDQR	FQN (106.49) FSMATDQR	3	2	681	1	1	1		
IPI00666034	2976	HIRV	IQIKIT	YESG	FINYSK	FVESKVESQHV	1	154.357	154.36	154.36	_ITYESG	FIN (de) YSK	9	2	712	1	1	1		
IPI00459432	185	DFQ	QR	PVDD	PTGAFANG	SITFKVQFSRSRGR	0.999998	58.4203	119.54	119.54	_FSWN (de) NITNS	IDIANISADFG	QR	33	4	1052	1	1	1	
IPI00221669	400	FSSA	QKARISGNS	IHNAS	PEHIA	YAGSVITV	1	127.582	152.06	127.58	_ISGN (de) SIHN (de) ASI	PEHIA	YAGSVITV	8	3	837	1	1	1	
IPI00122411	498	YID	IESK	VINEECKEN	ENESIN	AARGDKMNVG	0.999991	50.6066	180.88	50.606	_VINEECKEN (de) ESIN	AAR	9	2	995	1	1	1		
IPI00308990	317	RIDR	NPSPDE	IPQVGN	ISIKGN	PIDSESHS	1	74.7637	146.1	74.76	_IDRNPSPDE	IPQVGN (1) ISIK	15	3	698	1	1	1		
IPI00331318	198	QAQ	YWHDP	IKESV	RNYS	FIADINQ	1	170.22	259.68	170.22	_N (de) YSIFI	ADINQ	2	1	792	1	1	1		
IPI0098518	1253	EGY	YSCAHS	PIGKANTS	IEIIE	EGVRVKMN	1	108.716	160.48	108.72	_AN (de) TSIEI	IEGVR	1	2	473	1	1	1		
IPI00169617	174	AFNK	VD	LEAR	VHGPNASH	YTSIMTI	1	97.0952	97.095	97.095	_VHGPN (de) ASHYTS	IM (ox) ITWER	5	3	789	1	1	1		
IPI00947577	73	RNR	FPESG	DAARD	NVNCSG	YVEHEPIEIGKS	0.99998	47.0386	151.41	47.038	_DNVN (de) CSGV	YVEHEPIEIGK	4	3	688	1	1	1		
IPI00760106	58	PGEM	KKE	IRIAGG	ENCSGR	VEIKIHDK	1	82.5498	89.624	82.55	_IAGGEN (de) N (de) CSGR	VEIK	7	2	803	1	1	1		
IPI00153317	250	TEAC	QK	ITFP	NSTINTS	IGVIAQGEAIP	0.850582	7.55314	80.067	80.067	_ITFPNSTIN (de) TSGV	IAQGEAIP	4	9	853	1	1	1		
IPI00116913	3261	SRII	LIGG	IPVSGT	FHNFSG	CISNVFVQR	0.998694	28.8364	95.48	28.836	_IIGGIPVSGT	FHNF (de) FSGCISNVFVQR	14	3	941	1	1	1		
IPI00222489	276	DI	ISSSEM	VHRIVAN	ISGCAAV	NSETIMCC	1	111.645	204.23	111.65	_IVAN (de) ISGCAAVN (de) SETIM	CCIR	4	3	786	1	1	1		
IPI00223231	133	IAG	FP	TRVFF	QAFTK	NGSGATIP	1	92.6894	137.23	92.689	_FFQAFTKN (de) GSGAT	IPGAGANVQTR	8	3	852	1	1	1		
IPI00515360	3011	PEHE	ASFKIT	VPSSQ	NSSFR	IRSPVSI	1	80.6901	80.69	80.69	_ITVPSSQN (de) SSFR	IRSPVSI	8	2	662	1	1	1		
IPI00387318	190	ANSM	FNDT	IEIY	IVANES	PKPIPIPKKKG	0.999995	53.4536	104.9	53.453	_NEDRPI	APCGAIA	NSM (ox) FN (de) DTIEI	IVAN (de) ESDPK	21	4	1111	1	1	1
IPI00128269	41	AVM	NHRV	CPVEN	WSYNES	CSPPDAEQGGPK	0.952679	13.0389	163.95	13.038	_HVCPVEN	WSYN (de) ESCSP	DAEQGGPK	11	3	949	1	1	1	
IPI00118291	239	FGT	VIFV	SKVIEEP	KNVSC	ETRFKTD	1	116.511	116.51	116.51	_VIEEPKN (de) VSCETR	ETRFKTD	7	2	781	1	1	1		
IPI00118987	99	SFAE	IKH	KFW	SEWQ	NCATKSNY	1	133.148	133.15	133.15	_FIWSEPN (de) CSATK	NCATKSNY	8	2	785	1	1	1		
IPI00153632	471	DTWK	TI	ISEV	RFVHN	TSALIK	1	102.4	102.4	102.4	_FVHVN (de) TSAI	IK	5	2	615	1	1	1		
IPI00894972	270	KVIV	ITD	GEAS	DKGN	ISAAHD	1	101.637	101.64	101.64	_VIVITD	GEASDKGN (de) ISAAHD	15	3	833	1	1	1		
IPI00153143	96	ISK	DD	IEYAF	EKVVW	NTYIEIK	1	74.9442	88.898	74.944	_WVGN (de) WTYE	IK	2	2	649	1	1	1		
IPI00121378	361	IGD	TIP	VSCT	ISASRN	ATVVM	1	103.563	103.56	103.56	_N (de) ATVV	VM (ox) K	1	2	483	1	1	1		
IPI00119095	151	CHC	PK	KEG	YSIPT	SNTFP	1	96.6486	133.58	96.648	_EGTYSIPTSN (de) FTVP	DI	10	2	1573	1	1	1		
IPI00311405	139	CEFA	TPT	NGRES	QIN	ITVMAK	1	106.492	106.49	106.49	_ESQIN (de) ITVM	AK	5	2	626	1	1	1		
IPI00338785	1391	SIEA	EKRV	NASTDP	NSTVEQ	SAITDR	1	139.109	139.11	139.11	_VN (de) ASTTDPN (de) STVEQ	SAITR	9	2	997	1	1	1		
IPI00128984	58	IEK	RRQ	QCEEAQ	IENETT	GCCKM	1	158.576	158.58	158.57	_QQCIEEAQIEN (de) ETTG	CCK	11	2	1063	1	1	1		
IPI00138342	79	RFAP	PQ	AP	PAE	PSVFN	1	52.3715	52.372	52.372	_N (de) ATSY	PPMCSQDAGWAK	1	1	951	1	1	1		
IPI00315576	346	HP	FE	RVN	IT	IRWFS	1	103.433	103.43	103.43	_WFSFN (de) GTS	WQK	5	1	665	1	1	1		
IPI00114350	154	AEQ	TR	KIT	DVET	VQINQ	1	91.6567	91.657	91.657	_KITDVET	VQIN (de) QTSR	11	2	867	1	1	1		
IPI00116913	926	YAH	MAI	QPR	IVAR	INVTSP	1	83.3966	83.397	83.397	_IN (de) VTS	PDIFR	2	2	582	1	1	1		
IPI00466999	239	TIC	TIV	TGR	MISAF	NTS	1	96.6404	96.64	96.64	_M (ox) ISAFN (de) ATSG	K	6	2	572	1	1	1		
IPI00120848	258	FNS	ISS	ITD	DTF	CKAND	1	100.966	128.38	100.97	_VIHQFN (de) SISS	ITD	21	4	697	1	1	1		
IPI00122973	469	EMNG	TYV	CHAF	SSHGN	TRVNV	1	71.735	73.138	71.735	_SVKQEM (ox) N (de) GTYV	CHAFSSHGN (de) VTR	3	3	876	1	1	1		
IPI00120187	166	FSK	TR	HI	ER	IYDHN	1	60.5976	141.88	60.598	_IYIDHN (de) N (de) ITR	ITR	20	2	631	1	1	1		
IPI00114457	82	EVPP	GP	IPEA	VIAI	YNSTR	1	67.8798	67.88	67.88	_IASPPSQ	VEVPPGP	IPEAVIAIYN (de) STR	24	5	553	1	1	1	
IPI00856861	232	F	IR	PV	DD	WSI	1	57.5196	162.59	57.52	_KFN (de) STQIA	AMAPEHEEPR	3	3	692	1	1	1		
IPI00117312	164	KF	SR	DV	FIP	KPSW	1	90.3665	90.367	90.367	_DVFIP	KPSWGN (de) HTP	IFR	11	3	671	1	1	1	
IPI00128178	253	AH	VE	Q	EVK	QEV	1	35.7403	275.84	35.74	_VINN (de) ITN	DIR	4	2	587	1	1	1		
IPI00626793	824	PA	VV	G	IK	DVNS	1	81.6489	190.37	81.648	_IDVNSWIEN (de) FTK	ITDK	9	2	734	1	1	1		
IPI00114206	553	RIR	ITD	NM	FCAG	FKNV	1	82.4546	116.35	82.454	_ITDNM (ox) FCAG	FKNV (de) DTK	13	2	939	1	1	1		
IPI00876541	270	HTY	K	M	D	YNS	1	104.63	172.91	104.63	_M (ox) DYN	SFQGT	TPSN (de) ETK	12	2	868	1	1	1	
IPI00130764	289	VRC	P	M	A	G	1	87.5193	87.519	87.519	_CPM (ox) AGIS	H	21	4	886	1	1	1		
IPI00346062	237	I	G	H	P	N	1	49.2477	83.723	49.247	_DAHFN (de) STI	TEF	GETIN	5	3	815	1	1	1	
IPI00751912	676	T	K	D	G	A	1	59.3449	73.296	59.345	_IDGAT	VDTHH	IPVN (de) VTIR	14	3	654	1	1	1	
IPI01026704	1102	I	W	K	P	T	1	87.0009	87.001	87.001	_AHFSSIN (de) ITIR	ITIR	7	2	630	1	1	1		
IPI00109996	200	E	G	C	V	E	1	147.623	170.89	147.62	_YIKN (de) GN (de) AT	IIR	6	2	633	1	1	1		
IPI00985828	214	E	G	C	V	E	1	147.623	170.89	147.62	_YIKN (de) GN (de) AT	IIR	6	2	633	1	1	1		
IPI00138209	392	T	Q	D	K	I	1	114.498	114.5	114.5	_AN (de) YTI	IK	2	2	412	1	1	1		
IPI00123814	194	V	Y	S	E	N	1	110.633	110.63	110.63	_YM (ox) AIAIN (de) R	YMAIAIN (1) R	7	2	485	1	1	1		
IPI00111793	415	E	C	R	D	A	1	91.5493	108.7	91.549	_CVAN (de) YTG	N (de) GR	4	2	557	1	1	1		
IPI00221669	515	A	P	I	T	R	1	92.3071	98.443	92.307	_KHQV	TGYGIN (de) GTG	DSN (de) DFWR	11	3	806	1	1	1	
IPI00113539	528	Q	R	D	C	I	1	30.5108	199.41	30.51	_DQC	I	13	2	1099	1	1	1		
IPI00848693	1572	N	H	N	T	I	1	89.9108	89.911	89.911	_RQDP	VSWN (de) K	T	8	3	660	1	1	1	
IPI00136012	605	Y	T	V	S	S	1	215.081	215.08	215.08	_YTVS	S	17	4	996	1	1	1		
IPI00338209	204	I	R	P	H	S	1	56.2251	98.898	56.225	_QIFFN (de) GT	ETIR	15	2	664	1	1	1		
IPI00114206	413	V	I	T	A	A	1	79.9422	127.58	79.942	_WVITA	AHCI	1	7	1059	1	1	1		
IPI00677395	68	V	N	D	K	S	1	85.9581	85.958	85.958	_TMFN (1) STE	IK	4	2	544	1	1	1		
IPI00113539	1006	Q	A	T	T	I	1	148.409	209.66	148.41	_IDAPT	N (1) IQFVN (de) E	11	2	868	1	1	1		
IPI00113539	542	V	N	D	T	F	1	65.2255	125.5	65.225	_RHEEGHM (ox) IN (de) C</									







IPI00135010	949	VYTMISSHDQFTKYINFSTSEKEKTSVVEHR	1	97.2141	97.214	97.214	_YIN(de)FSTSEKEK	YIN(97.21)FSTSEKEK	3	2	674	1	1
IPI00135975	505	SSSHSPPEEQKMWLNWSDTIRHSRTIQIDPN	1	57.3483	94.767	57.348	_M(ox)VLWN(de)DSTIR	MVLWN(57.35)DSTIR	5	5	626	1	1
IPI00117986	243	NASSVPHRHGHFTGFNGSTIRDNIGAGYAD	1	59.1551	68.809	59.155	_HGHFTGFN(de)GSTIR	HGHFTGFN(59.16)GSTIR	8	3	478	1	1
IPI00406603	820	TIIRNIGIDENFVINSSTEHRSSSHENDM	0.999993	51.8091	223.11	62.055	_NIGIDEN(de)FVIN(de)SSTEHR	N(0.002)IGIDEN(0.998)FVIN(1)SN(-28.18)IGIDEN(28.18)FVIN(	12	3	687	1	1
IPI00229992	543	QPEIGCIRVAVSPANISREERREVFISVPG	1	75.7391	103.34	75.739	_VVAVSPAN(de)ISREER	VVAVSPAN(75.74)ISREER	8	3	510	1	1
IPI00338209	347	QRWRWIDPSSHPGIGNISRDIIREDIAGRI	1	49.1875	127.36	49.188	_IWDPSSHPGIGN(de)ISR	IWDPSSHPGIGN(49.19)ISR	12	2	854	1	1
IPI00130015	275	FASMGMEARIRIITNNSQPTIISPQEVVSC	1	70.7009	136.86	70.701	_IITN(de)N(de)SQPTIISPQEVVSCSPYAGQCDGGFPYIAGK	IITN(1)N(1)SQPTIISPQEVVSCSPYAGQCDGGFPYIAGK	4	4	997	1	1
IPI00130573	1067	HTNAGKIDIDTDFTSNASQPETKAIENLIQ	1	204.13	204.13	204.13	_DIDTDFTSN(de)ASQPETK	DIDTDFTSN(204.13)ASQPETK	9	2	885	1	1
IPI00165807	335	IVLIQKIEPEHIQIQNISQEQIAQVATIATK	1	209.239	209.24	209.24	_IEPEHIQIQN(de)ISQEQIAQVATIATK	IEPEHIQIQN(209.24)ISQEQIAQVA	10	3	935	1	1
IPI00113158	62	HDQCSPWKNACCSVNTSQEIHKADSRIYFN	1	85.7073	103.21	103.21	_NACCSVN(de)TSQEIHK	N(-85.71)ACCSVN(85.71)TSQEIH	7	2	825	1	1
IPI00400016	1239	ATEIEENRKYEQAKNISQDIEKQAARVHEE	1	131.958	193.96	131.96	_YEQAKN(de)ISQDIEK	YEQAKN(131.96)ISQDIEK	6	2	784	1	1
IPI00221890	27	GPDIHHEIYPIAKGDNQSPIEIHKTDIKHPD	1	115.119	115.12	115.12	_GDN(de)QSPIEIHKT	GDN(115.12)QSPIEIHKT	3	2	670	1	1
IPI00126050	351	QGGIGASQYVEIHKANISKYSIVMEADSGTF	1	75.0639	75.064	75.064	_IWIWTAEEQGGIGASQYVEIHKAN(de)ISK	IWIWTAEEQGGIGASQYVEIHKAN(75.064)ISK	24	4	752	1	1
IPI00119809	543	SFEGSKAPIPTAIDTNSKTPSIFPCASGAF	1	52.9273	93.21	52.927	_APIPTAIDTN(de)SSKTPSIFPCASGAFSSFR	APIPTAIDTN(1)SSKTPSIFPCASGAFSSFR	10	4	758	1	1
IPI00124666	596	PCDQKPSNARAIWJNGSKSISDQDQGVYV	1	94.6917	120.12	94.692	_AIWIIN(de)GSK	AIWIIN(94.69)GSK	6	2	502	1	1
IPI00985989	534	KNAYAYIGIHSPIRGNSSIPYVPSIQDVI	1	149.943	245.66	149.94	_GN(de)SSIPYVPSIQDVIIEK	GN(149.94)SSIPYVPSIQDVIIEK	2	2	1080	1	1
IPI00323857	307	IPDTPQGIIEAARKINASIVTSFVEIPIVSN	1	87.352	127.17	87.352	_KIN(de)ASIVTSFVEIPIVSN(de)VSIR	KIN(87.35)ASIVTSFVEIPIVSN(87.35)VSIR	3	3	797	1	1
IPI00112614	98	RYPTGPEAGVGVGNFNKSVISRVDAQRII	0.984724	18.0931	141.85	141.85	_YPTGPEAGVGVGN(de)K	YPTGPEAGVGVGN(0.015)FN(0.985)YPTGPEAGVGVGN(-18.09)FN(18.0	15	2	824	1	1
IPI00323857	322	NASIVTSFVEIPIVSNVSRASCCGGVFTT	1	87.352	127.17	87.352	_KIN(de)ASIVTSFVEIPIVSN(de)VSIR	KIN(87.35)ASIVTSFVEIPIVSN(87.35)VSIR	18	3	797	1	1
IPI00649186	417	PIIRKTCNPETPPIRNSIQCTARQCFAFY	0.999699	35.2151	94.882	94.882	_TCNPETPIR(de)ESIQCPTAR	TCN(-35.22)PETPIR(35.22)ES	11	3	798	1	1
IPI00119324	114	DDDYSPCRAIKGETVNTSIPFSFEGIFPPK	1	89.3739	89.374	89.374	_AIKGETVN(de)TSIPFSFEGIFPPK	AIKGETVN(89.37)TSIPFSFEGIFPPK	8	3	799	1	1
IPI00122257	313	DKNVNTSYGNPIINSSIPEDATIKADINQ	0.975138	15.9462	151.19	151.19	_VEFDKGNVNTSYGNPIIN(de)SSIPEDATIK	VEFDKGNVNTSYGN(0.025)PIIN(0.VEFDKGN(-41.97)VNTSYGN(-15.20	20	3	1084	1	1
IPI00378698	137	APPYIWAHKNEMINSSIMRITIRNIEEVE	1	74.2998	140.14	140.14	_NEIM(ox)IN(de)SSIM(ox)R	NEIM(1)SSIMR	6	2	671	1	1
IPI00310519	118	DRDRIISPSAFHDGNSIIRAVDRGDEGV	1	50.8268	116.43	50.827	_IISPSAFHDGN(de)FSIIR	IISPSAFHDGN(50.83)FSIIR	12	3	668	1	1
IPI00113057	396	PDCCTKINARIVGGTNASIGEWPPQVSIQVK	1	53.4532	167.51	53.453	_IVGGTN(de)ASIGEWPPQVSIQVK	IVGGTN(53.45)ASIGEWPPQVSIQVK	6	3	758	1	1
IPI00138061	295	CTPPYVENAVMISENRSIFSRDIEVFRCH	1	105.137	212.39	105.14	_CTPPYVEN(de)AVM(ox)ISEN(de)R	CTPPYVEN(105.14)AVMISEN(105.14)AVMISEN(1)R	6	3	666	1	1
IPI00987265	1171	QIEAAKAYITFVPTNHSIETGQNSVIGID	1	68.4451	144.63	68.445	_AYITFVPTN(de)HSIETQ(de)GN(de)N(de)SVIGIDTVR	AYITFVPTN(1)HSIETQ(1)N(1)SVIAYITFVPTN(68.45)HSIETQ(68.45)I	19	3	984	1	1
IPI00471081	412	GYWASINPFHKTLYNWSGYPYIIVHKIGDY	1	138.012	143.46	138.01	_TIYN(de)WSGYPYIIVHK	TIYN(138.01)WSGYPYIIVHK	4	2	846	1	1
IPI00229820	70	IHSAAASRDIKTASHNFGAIPRVEHPSRGH	1	105.029	138.19	105.03	_DIGTASHN(de)FSGAIPR	DIGTASHN(105.03)FSGAIPR	8	3	515	1	1
IPI00123223	1142	ISCISSSWKTEIQRNASFVYTKAIMAYAF	1	113.987	210.41	113.99	_TIEQRN(de)ASFPYTK	TIEQRN(113.99)ASFPYTK	7	3	563	1	1
IPI00321190	214	DCMKIVSDQAVTKNSSFIQGFVHVHVKDC	1	55.9857	223.29	55.986	_TN(de)SSFIQGFVHVHVKDCDRIGPGVSDICK	TN(1)SSFIQGFVHVHVKDCDRIGPGVSDI	2	4	821	1	1
IPI00459134	152	CDPCIEDSAAWIREMNCSETISQIQKIDAHF	1	131.172	143.93	131.17	_EM(ox)N(de)CSETISQIQK	EMN(131.17)CSETISQIQK	3	3	529	1	1
IPI00666034	2126	RAAISRPQQIHHYINASDWERQVAGAKEKI	1	75.3164	102.64	75.316	_IPQQIHHYIN(de)ASDWER	IPQQIHHYIN(75.32)ASDWER	10	3	670	1	1
IPI00130010	1048	TGEQVTFRCQSPYQNGSDTVCVNSRWIGQ	1	186.836	223.29	223.29	_CQSPYQMN(ox)N(de)GSDTVCVNSR	CQSPYQMN(1)GSDTVCVNSR	8	3	741	1	1
IPI00128076	269	DEEISCTVVEIKYKNASAIIFIPDQGRMQ	1	131.184	131.18	131.18	_YKGN(de)ASAIIFIPDQGR	YKGN(131.18)ASAIIFIPDQGR	4	2	876	1	1
IPI00307966	101	QCEIISTFGAFVSKNPNITREDYAPVIKI	0.880942	8.69187	136.38	136.38	_GAFVSKN(de)PCNITR	GAFVSKN(0.881)PCN(0.119)ITR	7	3	489	1	1
IPI00652728	262	TFPFSKIFTFVSSVNPNIWSEISAIEIIXSI	1	85.2483	85.248	85.248	_IFTPVSSVNPN(de)ITWSEISAIEIIXSI	IFTPVSSVNPN(85.25)ITWSEISAIEI	10	3	849	1	1
IPI00848693	723	GDTVARPIIHEFYDDNWTGIDRQFIWGGI	0.809064	6.27095	134.32	134.32	_GDTVARPIIHEFYDDN(de)NTWGI	GDTVARPIIHEFYDDN(0.809)N(0.19)GDTVARPIIHEFYDDN(6.27)N(-6.2	16	3	902	1	1
IPI00311405	202	TRIKGEAEYQEIERNPNTVTVISRYRIVPSR	0.998201	27.4423	115.63	115.63	_IKGEAEYQEIERNP(de)GTVTVISR	IKGEAEYQEIERN(0.002)PN(0.998)IKGEAEYQEIERN(-27.44)PN(27.44	14	3	826	1	1
IPI00119063	1826	GTCNKADGSGSVLRNSTIIVMHKVIDESI	1	87.1843	87.184	87.184	_N(de)STIIVMHK(ox)K	N(87.18)STIIVMHK	1	2	598	1	1
IPI00923031	58	NVTWRVNTMTGQTANATSIIGTMDAFPKI	0.993221	21.6589	92.8	92.8	_VTNIM(ox)TGQTAN(de)ATSIIGTMDAFPK	VTN(0.007)IMTGQTAN(0.993)ATSIIVTN(-21.66)IMTGQTAN(21.66)AT	11	4	655	1	1
IPI00405742	798	WCRGNRCVYEAICSNVTSECPVPVITRIQP	1	100.187	100.19	100.19	_CVYEAICSN(de)VTSECPVPVITR	CVYEAICSN(100.19)VTSECPVPVITR	9	2	1227	1	1
IPI00515360	89	VSGDFQMVYFRAIVNFTRSEYSPQIEDAS	1	100.188	100.19	100.19	_AIVN(de)FTR	AIVN(100.19)FTR	4	2	411	1	1
IPI00674656	107	SIFPIIHFHKGRIININWQGGTSGVIRIINI	1	120.627	120.63	120.63	_IIN(de)WTQGGTSGVIR	IIN(120.63)WTQGGTSGVIR	4	2	844	1	1
IPI00134585	316	VYVQPNQKETAEYAAANIITQAVFDYFEDYFAM	1	63.3721	63.372	63.372	_ETAEYAAAN(de)ITQAVFDYFEDYFAM(ox)EYAI	ETAEYAAAN(1)ITQAVFDYFEDYFAMEYAIETAEYAAAN(63.37)ITQAVFDYFEDYF	8	3	1143	1	1
IPI00126834	225	ERETVKEIQVYISPRNNTISVHPSTRIQEGG	1	118.757	118.76	118.76	_N(de)TTISVHPSTR	N(118.76)TTISVHPSTR	1	2	607	1	1
IPI00225715	501	VYVYGGQQRGSISSPNVTISCKDTYCNIGWT	1	85.5541	85.554	85.554	_ISSSPN(de)VTISCK	ISSSPN(85.55)VTISCK	6	2	647	1	1
IPI00118987	228	RFPNQKAVAFVKNVNNITINDEAAMVEAVAI	0.762554	6.2661	91.603	91.603	_NVN(de)ITINDEAAM(ox)VEAVAINPVSAFVETDFIM(ox)YK	N(0.18)NVN(0.763)ITIN(0.057)DEN(-6.27)VNN(6.27)ITIN(-11.24	4	4	1051	1	1
IPI00674255	717	TSTCERDVRVSHVINDTHMFKSIPSSRKEK	1	60.4896	91.961	60.49	_VSHVIN(de)DTHM(ox)K	VSHVIN(60.49)DTHMK	6	2	649	1	1
IPI00123040	119	IIVRVNKGPIANPIWNVGTGDRWIRAEIA	0.999995	53.3626	114.63	114.63	_GPIANPIWN(de)VTGTGTR	GPIANPIWN(-53.36)PIWN(53.36)VTGTG	9	2	851	1	1
IPI00120222	415	ITTSTVQVQIEPYANYFTVKSQNRVSGID	1	108.496	108.5	108.5	_GVHFSPPAAAGITSTVQVQIEPYAN(de)YFTVTK	GVHFSPPAAAGITSTVQVQIEPYAN(1)GVHFSPPAAAGITSTVQVQIEPYAN(1	26	3	1125	1	1
IPI00124640	539	KVGNVEGEGHCFHNDQTCCKDSAGVWACCP	1	103.272	130.11	103.27	_VGNVEGEGHCFHND(de)QTCCK	VGN(-103.27)VEGEGHCFHND(103.27)VEGEGHCFHND(1)QTCCK	15	3	804	1	1
IPI00132600	899	IHSGPPYVYFIEEGYNSRKGQNMVCGGGM	1	81.4796	81.48	81.48	_SIAQYIHSPPYVYFIEEGYN(de)YSSR	SIAQYIHSPPYVYFIEEGYN(81.48)YSSR	21	3	960	1	1
IPI00223714	77	AIKKATAAAGYDVEKNRRIKIGKISVSKG	0.967104	14.6833	117.2	117.2	_AIAAAGYDVEKN(de)NSR	AIAAAGYDVEKN(0.967)N(0.033)SR	12	2	790	1	1
IPI01026704	1083	ATIITCHIIPSDVSNQVNSIHWKPTIKAHF	1	55.0512	55.051	55.051	_IATIITCHIIPSDVSNQV(de)VSIIHWKPTIK	IATIITCHIIPSDVSNQV(1)VSIIHWKPTIATIITCHIIPSDVSNQV(55.05)VSII	17	4	824	1	1
IPI00400016	1105	VKVDQNMIDRIRQRVNSIHSISRIQIRN	1	90.9131	96.604	90.913	_VN(de)SSIHSQISR	VN(90.91)SSIHSQISR	2	2	615	1	1
IPI00125813	83	YKQENNIINAEHGNSIFINENSTFESFGY	0.987838	18.2165	95.108	95.108	_QENNIINAEHGN(de)SSIFIEN(de)STFESFGYHSVSPDR	QENNIIN(0.223)AEHGN(0.988)SQEN(-34.77)N(-34.77)IIN(-5	14	4	1018	1	1
IPI00170146	130	EVIHNPDAIGVIFNDSFSYQIKVIRMYGN	1	73.753	119.8	73.753	_IIGVPSIEDIDEVIHNN(de)IPDAIGVIFN(de)DSFSYQ(de)IK	IIGVPSIEDIDEVIHNN(1)IPDAIGVIFNIGVPSIEDIDEVIHNN(73.75)IPDA	27	3	1296	1	1
IPI00876233	64	FYCRFTECCEERPINTSAIKIDIEEKIFGQ	1	66.0679	78.505	66.068	_FTECCEERPIN(de)TSAIK	FTECCEERPIN(66.07)TSAIK	12	2	1047	1	1
IPI00119063	2476	IPQPMGLIAVANDNSCEISPCRNNGGQ	0.896978	9.39851	75.3	75.3	_VDIPQPMGLIAVANDN(de)SCEISPCR	VDIPQPMGLIAVAN(0.103)DTN(0.8)VDIPQPMGLIAVAN(-9.4)DTN(9.4	18	4	726	1	1
IPI00420867	376	FHFINITRSQSNINTVNDVWFKCPKPKIVE	0.999963	44.3208	135.02	135.02	_QSINTVN(de)DTVWK	QSIN(-44.32)TVN(44.32)DTVWK	7	2	703	1	1
IPI00108098	197	EDNQIIVKKGFCADNSTVSENPEDWVPNT	0.987097	19.0605	123.44	123.44	_KGFCEADN(de)STVSENPEDWVPNTGEGM(ox)EK	KGFCEADN(0.987)STVSEN(0.012)N	8	3	1121	1	1
IPI00132460	91	KKYVYIERVQREKANGTVHVGHPSKVVI	1	80.3118	80.312	80.312	_AN(de)GTVHVGHPSK	AN(80.31)GTVHVGHPSK	2	3	474	1	1
IPI00876306	80	IDICVSENETIKHISNDITTPESTMTVGQAR	1	122.44	122.44	122.44	_HISN(de)DITTPESTMTVGQAR	HISN(122.44)DITTPESTMTVGQAR	4	2	1032	1	1
IPI00400016	1437	NKAHEAERIASAVQKNATSTKADAERTFGEV	1	102.277	102.28	102.28	_IASAVQKN(de)ATSTK	IASAVQKN(102.28)ATSTK	8	2	660	1	1
IPI00396840	186	SEAERKAQYVYRACMNETRIEIRAKPIIMEI	1	82.3618	118.87	82.362	_ACM(ox)N(de)ETRIEIR	ACMN(82.36)ETRIEIR	4	2	770	1	1
IPI00131168	484	YEIEFVFGPIGRVNYTRAEEIFPSRIMKT	1	79.4662	79.466	79.466	_VN(de)YTRAEEIFSR	VN(79.47)YTRAEEIFSR	2	2	743	1	1
IPI00968978	454	GDQYSCMVGHEAIPMNFTQKTDRISGKPTN	1	111.769	149.52	111.77	_GDQYSCMVGHEAIPMN(1)FTQK	GDQYSCMVGHEAIPMN(111.77)FTQ	17	3	825	1	1
IPI00153756	118	GIIAGAAFKPEYNRINETIYENAKIISDNDK	1	88.0283	177.83	88.028	_IIN(de)ETIYENAK	IIN(88.03)ETIYENAK	3	2	655	1	1
IPI00467600	1283	GIEKVIIEKKNRCDNNDTIIVRKGCKGCSQQ	0.951793	12.9543	147.26	147.26	_CDN(de)DTIIVR	CDN(-12.95)N(12.95)DTIIVR	4	2	611	1	1
IPI00987951	499	FDEFFSQGAPGVEKNSTICDICIGPIKCAP	1	171.255	175.28	171.26	_N(de)STICDICIGPIK	N(171.26)STICDICIGPIK	1	2	746	1	1
IPI00130325	181	GKRIPKMTQIIGITPNATHIRPPRDCQEIF	1	62.8132	70.96	62.813	_M(ox)TQIIGITPN(de)ATHIRPPR	MTQIIGITPN(62.81)ATHIRPPR	10	4	543	1	1
IPI00153187	139	MDAYEVSNADFEKFNSTGYITEAEKFGDSF	1	73.4663	73.466	73.466	_FVN(de)STGYITEAEK	FVN(73.47)STGYITEAEK	3	3	487	1	1
IPI00320605	51	DCIQSGPGCSWCQKINFPGPEPDSIRCDTR	1										





IPI00875419	216	PSEEA	1	62.2028	278.4	62.203	_AVISM	7	3	681	1	1
IPI00117094	59	RCDP	0.999999	58.7639	178.15	178.15	_IAM	10	2	765	1	1
IPI00109727	42	ACIVN	0.985871	18.4394	205.18	205.18	_HEN	3	3	724	1	1
IPI00875419	206	TVTKK	1	102.903	102.9	102.9	_VIVAPP	11	2	729	1	1
IPI00226714	223	QMEEI	1	121.246	149.32	121.25	_SSQSN	5	3	962	1	1
IPI00356462	560	IQMISD	1	124.434	124.43	124.43	_ISN	2	2	932	1	1
IPI00122493	181	CPRMV	1	79.7113	139.11	108.18	_YHYN	4	3	732	1	1
IPI00621027	800	ENIYS	1	102.505	102.5	102.5	_N	1	2	693	1	1
IPI00133500	408	IIPMN	0.839534	6.32225	136.68	136.68	_QSQP	22	3	905	1	1
IPI00109108	596	TAMAN	0.999982	44.4403	265.77	171.76	_T	10	3	634	1	1
IPI00125530	330	DNTEY	1	83.087	83.087	83.087	_EM	5	2	803	1	1
IPI00320204	476	EVFP	1	81.3376	88.087	81.338	_IN	2	2	489	1	1
IPI00416285	297	HCRHS	1	64.954	64.954	64.954	_HSPV	13	4	821	1	1
IPI00623114	1904	SIIIP	1	95.903	185.26	185.26	_G	8	2	753	1	1
IPI00314443	558	NCQF	1	84.6583	84.658	84.658	_KCQEA	7	3	442	1	1
IPI00119299	647	VGIGN	1	102.4	102.4	102.4	_HDPN	4	2	755	1	1
IPI00830749	868	ITSQ	0.933806	11.4945	213.99	213.99	_QI	9	3	776	1	1
IPI00128989	255	QTIQ	1	190.67	190.67	190.67	_QI	9	3	869	1	1
IPI00466733	326	RFFDH	1	73.4642	195.23	73.464	_F	8	3	762	1	1
IPI00115530	63	IYISA	1	39.3881	77.907	39.388	_I	16	4	896	1	1
IPI00170006	306	HRHFN	0.999993	51.5542	91.62	91.62	_EVM	4	2	738	1	1
IPI00120245	941	KSIIW	0.999982	47.5163	97.095	74.944	_EN	4	2	611	1	1
IPI00323624	1617	IYMW	1	88.5651	88.565	88.565	_YIM	6	3	892	1	1
IPI00881745	174	IAGFD	0.750612	7.69283	103.71	103.71	_N	2	2	775	1	1
IPI00406302	64	GDAFI	1	156.702	156.7	156.7	_EIVH	7	3	1072	1	1
IPI00387289	489	PGSP	1	110.923	110.92	110.92	_DGASE	9	2	641	1	1
IPI00320420	327	CSTN	1	84.1734	156.08	84.173	_Q	4	2	702	1	1
IPI00471081	72	IKTVI	1	71.5582	196.64	71.558	_T	14	2	1019	1	1
IPI00284816	585	VSIGV	1	116.347	116.35	116.35	_D	5	3	891	1	1
IPI00115116	88	VVGIS	1	87.258	119.53	87.258	_Q	3	2	515	1	1
IPI00340140	126	TASPR	1	103.534	103.53	103.53	_ATSQ	7	3	964	1	1
IPI00381303	497	RISHY	1	183.358	183.36	183.36	_EIN	3	2	867	1	1
IPI00316469	624	AGMAN	0.999672	37.9308	361.2	202.34	_T	10	3	700	1	1
IPI00420835	284	VSDDI	1	122.326	122.33	122.33	_AN	2	2	555	1	1
IPI00321348	325	GERRI	1	92.3103	149.73	92.31	_I	12	3	749	1	1
IPI00405742	761	SFGKN	1	95.4173	122.39	95.417	_I	7	2	730	1	1
IPI00626950	320	VIKDP	1	88.5072	240.2	88.507	_V	3	2	784	1	1
IPI00230718	61	QHYP	1	115.064	115.06	115.06	_M	6	3	639	1	1
IPI00122973	204	REI	1	58.8484	169.25	58.848	_T	15	2	1109	1	1
IPI00828688	350	AGEYI	1	65.7918	159.8	159.8	_V	9	2	1046	1	1
IPI00138180	535	EDSN	0.793969	6.15565	137.72	137.72	_F	21	3	946	1	1
IPI00125266	341	TIFID	1	135.83	135.83	135.83	_CIN	3	2	502	1	1
IPI00223987	447	NWGI	1	126.705	126.71	126.71	_EET	8	3	638	1	1
IPI00137958	82	GSRA	1	75.0178	75.018	75.018	_ATHA	13	3	612	1	1
IPI00471273	133	IPQDV	1	88.5406	88.541	88.541	_G	25	3	1179	1	1
IPI00466733	475	IQSQ	1	182.886	182.89	182.89	_ECS	8	2	781	1	1
IPI00473880	459	GDQV	1	80.8588	111.4	80.859	_G	17	3	825	1	1
IPI00137792	518	PGSSH	0.942615	12.1753	68.046	68.046	_YQ	24	3	1373	1	1
IPI00308885	103	DKYKI	0.333333	0	73.11	73.11	_I	7	3	854	1	1
IPI00850698	584	KESK	0.99977	36.3894	99.451	99.451	_V	12	2	896	1	1
IPI00139788	513	FDEF	1	152.876	208.72	152.88	_N	1	2	746	1	1
IPI00118674	54	IYIP	1	69.6388	109.68	69.639	_I	3	4	845	1	1
IPI00129243	162	NIIT	1	91.9612	91.961	91.961	_K	5	2	624	1	1
IPI00131091	1387	GTIKI	1	76.3779	180.64	135.09	_TYN	9	3	811	1	1
IPI00128269	37	VYAM	0.5	0	189.82	189.82	_H	7	3	949	1	1
IPI00473880	474	NF	1	223.177	223.18	223.18	_I	2	2	1166	1	1
IPI00221833	314	PVYR	0.5	0	142.26	142.26	_D	6	3	801	1	1
IPI00169870	276	EIDC	1	50.9863	116.06	50.986	_AM	3	4	828	1	1
IPI00881836	320	CSEEA	1	75.239	75.239	75.239	_KIN	3	3	825	1	1
IPI00111908	135	YMES	0.981166	19.6323	88.992	84.14	_V	8	3	765	1	1
IPI00116509	656	GNEK	1	104.455	104.45	104.45	_VTIN	4	2	761	1	1
IPI00114065	325	SKIT	1	70.8373	70.837	70.837	_ITDT	14	3	720	1	1
IPI00119299	567	KPIPI	0.998359	27.843	109.65	109.65	_Y	5	3	1027	1	1
IPI00130624	234	WRIS	1	198.867	198.87	198.87	_E	8	2	845	1	1
IPI00881745	179	PSQD	0.826355	4.81185	130.83	130.83	_N	7	2	1162	1	1
IPI00114065	325	SKIT	1	70.8373	70.837	70.837	_ITDT	10	3	720	1	1
IPI00459432	166	AKFS	0.973536	17.6725	63.008	63.008	_F	14	3	1402	1	1
IPI00129010	124	VSAVS	1	82.5896	164.53	82.59	_CFM	5	3	766	1	1
IPI00406603	959	EDTD	0.500918	0	94.08	94.08	_G	26	3	1121	1	1
IPI00131223	1069	PSRAY	1	109.845	109.84	109.84	_V	3	3	458	1	1
IPI00115089	129	STPIY	1	116.238	116.24	116.24	_I	3	2	630	1	1
IPI00468814	437	SYNG	0.999807	37.1416	134.3	134.3	_NIN	3	2	561	1	1
IPI00111960	390	RWGY	1	66.2987	97.431	66.299	_Q	5	2	497	1	1
IPI00134585	669	FAIAR	1	72.2004	96.113	72.2	_I	4	2	599	1	1
IPI00109946	70	TIHTK	0.99572	23.6666	136.5	136.5	_I	7	2	623	1	1
IPI00133103	216	DYFG	1	108.564	162.32	108.56	_V	9	3	514	1	1
IPI00409393	339	IRYGE	1	59.5022	117.3	59.502	_Y	14	3	660	1	1
IPI00310059	90	SKEYS	0.527651	0	50.869	50.869	_AN	9	3	1068	1	1
IPI00123040	210	PHFIR	1	70.536	201.27	201.27	_I	11	2	1112	1	1
IPI00134390	332	DVSKY	1	101.974	101.97	101.97	_RN	2	2	596	1	1
IPI00165807	80	HNSH	1	41.9364	48.607	41.936	_I	9	4	1037	1	1
IPI00119809	572	AFFSR	1	147.561	209.79	147.56	_V	10	2	886	1	1
IPI00469426	257	TSVGT	1	87.4985	88.075	87.498	_ITWS	7	2	722	1	1
IPI00265291	323	DVEID	1	95.0939	95.094	95.094	_V	3	2	649	1	1
IPI00121421	306	NTAD	1	95.6224	95.622	95.622	_APSN	4	2	1042	1	1
IPI01026847	220	PIKFD	0.999992	51.2191	85.006	85.006	_I	10	2	798	1	1
IPI00263041	249	DAFIK	0.985623	18.3605	93.823	93.823	_NFN	3	2	802	1	1
IPI00788443	734	TGEQ	1	132.735	137.44	132.74	_C	8	2	1103	1	1
IPI00115793	467	IKIVK	1	99.2826	99.283	99.283	_Y	4	2	573	1	1
IPI00316359	543	ATFYI	0.8004	6.03147	59.585	59.585	_Q	5	3	811	1	1
IPI00121120	1398	TQMFI	1	107.055	107.06	107.06	_EASN	5	2	678	1	1
IPI00469426	425	SIYVK	1	95.5698	95.57	95.57	_I	11	2	832	1	1



IPI00316469 620 GYQIAGMANRTTIVDNNWNNSHIAIVGKAM 0. 997687 25. 8924 336. 04 291. 18 \_TTIVDN (de) N (de) TWNN (de) SHIAIVGK\_ 291. 18 TTIIVDN (0. 998) N (0. 973) TWNN (0. 102) TTIIVDN (25. 89) N (15. 27) TWNN (-10 6 2 1051 1 1

IPI00121378	265	TIQVIPPKNAIKEGDNTIQCIGNGNPPPEE	0.999799	36.3174	88.708	88.708	_EGDN (de) ITIQICIGN (de) PPPPEEM (ox) FYIPGGPEGIR_	EGDN (1) ITIQICIGN (0.138) GN (0.86) EGDN (36.32) ITIQICIGN (-7.98) GN	4	4	903	1	1
IPI00348266	316	EQRNVRTIPHHQYNATINKYSHDIAIEI	1	56.5691	145.81	56.569	_TIPHHQYN (de) ATIN (de) K_	TIPHHQYN (1) ATIN (1) K	8	2	770	1	1
IPI00285117	330	FGFNARQRYVEDIVINETINKNRIGQRTK	1	64.7495	120.87	120.87	_QRVEDIVIN (de) ETINK_	QRVEDIVIN (64.75) ETIN (-64.75)	9	3	579	1	1
IPI00126827	172	APSPCSIQGVYVGTNTVINCSPRSPKPTAQ	0.986528	18.6467	109.85	88.627	_VIVPPAPSPCSIQGVYVGTN (de) VTINCK_	VIVPPAPSPCSIQGVYVGTN (0.987) VIVPPAPSPCSIQGVYVGTN (18.65)	21	3	957	1	1
IPI00338018	601	IIKTTQGSKIYIKGWNETIIVNEIKSKESDI	1	68.7543	128.95	128.95	_GVN (de) ETIIVNEIK_	GVN (68.75) ETIIVN (-68.75) EIK	3	2	665	1	1
IPI00468236	803	DFKNTDKNENPYIGINYTCRYDRFRNPPH	0.999999	60.643	113.01	113.01	_NTDKNENPYIGIGN (de) YTICR_	NTDKNENPYIGIGN (1) YTICR	13	3	710	1	1
IPI00119063	3663	CGTGVKTCPIDEFQNCNTICKPIAWKDCGDE	1	70.9421	172.93	70.942	_TCPIDEFQNCN (de) N (de) TICKPIAWK_	TCPIDEFQNCN (1) N (1) TICKPIAWK	10	3	833	1	1
IPI00331175	312	KTAFAPDPVPICIGNARTIANRNFDTCAKMQ	1	143.249	143.25	143.25	_TAFAPDPVPICIGN (de) R_	TAFAPDPVPICIGN (143.25) R	15	3	581	1	1
IPI00123223	1426	EVSNNVNIIYDQVNTQIAFSTIIQQDIPV	0.999958	48.4934	173.59	103.12	_TEVSNNVNIIYDQVNT (de) QTIAFSTIIQQDIPVR_	TEVSNNVNIIYDQVNT (1) QTIAFSTIIQQDIPVR	17	4	949	1	1
IPI00626555	241	HVHVDIQSFGINDINMTHYIKHISFGEDYP	0.959757	13.7747	192.57	139.7	_SFQQSHVHVDIQSFGINDIN (de) M (ox) THYIK_	SFQQSHVHVDIQSFGINDIN (0.04) IN (0.0) SFQQSHVHVDIQSFGINDIN (-13.77) I	21	4	804	1	1
IPI00222967	265	EKVFPFIFNINPATTNFGTSCQPQSAQIRIN	0.997677	26.5955	94.389	92.034	_VPFIFNINPATTN (de) FTGSCQPQSAQIR_	VPFIFNIN (0.002) PATTN (0.998) FTVPFIFN (-38.59) IN (-26.6) PATTN	13	4	728	1	1
IPI00405742	1005	AFEPIRSFSVGGRSINVTGGQFSIIQKFAV	1	55.196	233.02	55.196	_SIN (de) VTGGQFSIIQK_	SIN (55.2) VTGGQFSIIQK	3	3	498	1	1
IPI00113797	331	PTIPPVSHFIIGWVFNITGQDVIKIQSDV	1	65.2071	65.207	65.207	_TPTIPPVSHFIIGWVFN (de) ITGQDVIK_	TPTIPPVSHFIIGWVFN (1) ITGQDVIK	17	3	963	1	1
IPI00118674	572	SSPTNTTYVQYAIANTIGKATNITREQCQD	1	125.587	125.59	125.59	_SYIDDRPIQHYIAVSSPTN (de) TTYVQYAIAN (de) ITGK_	SYIDDRPIQHYIAVSSPTN (1) TTYVQY/SYIDDRPIQHYIAVSSPTN (125.59) T	30	3	1268	1	1
IPI00400202	168	PDIEPIVKAIEYFNNTGHSHIFAIREVKS	0.85176	7.60631	89.866	89.866	_HAIEYFN (de) NTGHSHIFAIR_	HAIEYFN (0.148) N (0.852) NTGHSHIFAIEYFN (-7.61) N (7.61) N (-32.9	8	3	748	1	1
IPI00132474	406	DGVTINKYSYCKNGVNGTGENGRKCSNISIG	1	76.8199	265.12	76.82	_SYCKN (de) GVN (de) GTGEN (de) GRK_	SYCKN (1) GTGEN (1) GRK	8	2	872	1	1
IPI00322575	917	PGQQPPIIIVNKTGAKIDDFHISIEQ	0.96407	14.2865	61.499	38.691	_QSDYCWEIFAPHM (ox) YFITPGQQPPIIIVN (de) K_	QSDYCWEIFAPHMYFITPGQQPPIITN (0. QSDYCWEIFAPHMYFITPGQQPPIITN (	32	5	784	1	1
IPI00468055	281	GPIETIKIMESHNPNGTFSAKGYSVCEVD	1	65.8954	97.463	65.895	_IM (ox) ESHPN (de) GTFSAK_	IMESHPN (1) GTFSAK	7	2	718	1	1
IPI00123652	198	IDYVYGRITRISLTNETFRKTQIYP	1	131.819	131.82	131.82	_ISITN (de) ETRFK_	ISITN (131.82) ETRFK	5	2	605	1	1
IPI00132474	50	CGECIQAGPNCWCNTTTFIQEGMPTSARCD	0.99798	26.9388	104.38	104.38	_SCGECIQAGPNCWCNTN (de) TTFIQEGM (ox) PTSAR_	SCGECIQAGPN (0.002) CGWCTN (0.99) SCGECIQAGPN (-26.94) CGWCTN (26	17	4	853	1	1
IPI00136938	318	KMTIPTVDVIGRSINGTFPFGKWSVDSVFN	1	101.929	101.93	101.93	_SIN (de) GTFPFGWK_	SIN (101.93) GTFPFGWK	3	2	608	1	1
IPI00117957	275	IQRITIGNINRTDIEENGTFANIPRVREIHE	1	85.1641	136.3	136.3	_ITDIEN (de) GTFANIPR_	ITDIEN (85.16) GTFANIPR	6	3	521	1	1
IPI00468055	46	RDFIPSTISFTRWNQNTVEIQGLRTFTPTIR	0.995533	23.4759	84.946	69.361	_DFIPSTISFTWNQCN (de) N (de) TEVIQGITR_	DFIPSTISFTWN (0.006) YQN (0.996) DFIPSTISFTWN (-23.48) YQN (23.4	15	3	949	1	1
IPI00468674	606	SIDAYPVINQAQAMENHTEVHFQKCGCPDNK	0.999993	51.6499	122.49	122.49	_SIDAYPVINQAQAM (ox) EN (de) HTEVHFQK_	SIDAYPVIN (0.023) SN (0.977) SIDAYPVINQAQAM (-16.33) SN (16.3	16	4	698	1	1
IPI00170146	911	PGQIPQGRITSIIIVNTESNIEDFIQSITKH	1	93.4997	276.68	93.5	_TSIIVIVN (de) N (de) TESN (de) IEDFIQSITK_	TSIIVIVN (1) N (1) TESN (1) IEDFIQSITSIIVIVN (93.5) N (93.5) TESN (93.	7	3	794	1	1
IPI00278602	459	EPIIYMPPPPQPIINTTESIRINHEIRGWV	1	84.6803	84.68	84.68	_AIM (ox) YISEEPIIYMPPPPQPIIN (de) TTESIIR_	AIMYISEEPIIYMPPPPQPIIN (1) TTESIIR	23	4	836	1	1
IPI00118674	111	KDIYEYSVWQGWPNWRTERIPQCVRSTVIRI	0.977265	16.3331	121.72	121.72	_DIYEYSVWQGWPN (de) R_	DIYEYSVWQGWPN (0.023) SN (0.977) DIYEYSVWQGWPN (-16.33) SN (16.3	15	2	1008	1	1
IPI00129220	436	GIVTSTRFRTASVSNQTEPPKVRIEDRSTT	1	174.592	174.59	174.59	_TASVSIN (de) QTEPPKVR_	TASVSIN (174.59) QTEPPKVR	7	2	814	1	1
IPI00113057	494	EGNDIAIHKIQTPIINTEFKPICIPSKAD	1	80.6384	137.61	80.638	_IQTPIN (de) YTEFKPICIPSK_	IQTPIN (1) YTEFKPICIPSK	6	3	760	1	1
IPI00311405	332	EATNPIGTIRSGQVEVNIETPPYPTPEHGR	1	69.7632	69.763	69.763	_SGQVEVN (de) IETPPYPTPEHGR_	SGQVEVN (69.76) IETPPYPTPEHGR	7	3	787	1	1
IPI00890869	100	APAEEKILCQKGSNQTECFNIRFIQYIN	0.998158	27.3384	127.71	127.71	_GKSN (de) QTECFNIR_	GKSN (0.998) QTECFN (0.002) FIR	4	2	801	1	1
IPI00129243	106	IFRSINGVIPEGGAINITDSGYSRVAKIFFS	1	99.3661	128.98	99.366	_SIN (de) GVIPEGGAN (de) ITDSGYSR_	SIN (1) GVIPEGGAN (1) ITDSGYSR	13	2	1026	1	1
IPI00396840	382	VYDKEYIRQVSTIINTDKICINNYMAMNI	1	67.4565	123.95	67.456	_QVSTIIN (de) N (de) TDK_	QVSTIIN (67.46) N (67.46) TDK	7	2	618	1	1
IPI00123746	671	NIPIMVDSGKPMNITDRIWCVCSCKNSK	0.999825	37.6457	78.456	78.456	_ANYNIPIMVDSGKPMN (ox) TN (de) ITDIR_	ANYNIPIMVDSGKPMN (1) ITDIR	3	3	899	1	1
IPI00127770	103	KTYCANEPISNCSQVNRDICSQVNIETPVV	1	92.6845	165.58	165.58	_TYCANEPISN (de) CSQVNIETPVV_	TYCANEPISN (1) CSQVNIETPVV	15	2	958	1	1
IPI00131693	60	PCGTASWDAAVTRVWNGDIIADPDIINGSQII	1	137.731	137.73	137.73	_VN (de) GTDIIADPDIIN (de) GSIQIIIR_	VN (137.73) GTDIIADPDIIN (137.73)	2	2	1006	1	1
IPI00119063	4365	QCACVKNKQGDVTCNCTDGRVAPSCITCID	1	76.262	76.262	76.262	_QTGDVTCN (de) CTDGR_	QTGDVTCN (1) CTDGR	8	2	743	1	1
IPI00138199	1523	SEDQYCTCPRETFIINTCCKECPGPHYTK	1	129.343	129.34	129.34	_ETFIIN (de) TTCVK_	ETFIIN (129.34) TTCVK	6	2	664	1	1
IPI01026704	882	SGIEIEIQKDSCESNQNTCRVGYFRTGDDV	0.999491	32.9331	189.3	189.3	_DESCSN (de) ITCR_	DESCSN (0.001) QN (0.999) ITCR	8	2	743	1	1
IPI00608044	277	FQKWSVVPVIGKEQNYTCHVHHEGPEPIT	1	93.4953	221.47	93.495	_EQN (de) YTCVHHEGPEPITIR_	EQN (1) YTCVHHEGPEPITIR	3	3	820	1	1
IPI00312980	277	FQKWSVVPVIGKEQNYTCHVHHEGPEPIT	0.987172	18.8624	126.84	126.84	_EQN (de) YTCVHHEGPEPITIR_	EQN (0.987) YTCVHHEGPEPITIR	3	3	803	1	1
IPI00323053	489	KVNGMKTSRPTDNSINVTGPPYETNGPKTF	0.830043	6.88762	126.26	126.26	_TSRPTDNSIN (de) VTCGPPYETN (de) GPK_	TSRPTDNSIN (1) VTCGPPYETN (-6.89) SIN (6.89) VTCGP	10	3	836	1	1
IPI00122494	193	PVATEQIISTFTVGNNTCFYKCYCYRETE	0.950566	12.8395	121.39	121.39	_TEVAPVATEQIISTFTVGN (de) NTCFCYK_	TEVAPVATEQIISTFTVGN (0.951) N (1) TEVAPVATEQIISTFTVGN (12.84) N	20	3	1007	1	1
IPI00624663	881	KTVSWAVTPKSIGEVNFTAATAEQSPICEG	1	95.823	241.44	95.823	_SIGEVN (de) FTATAEAQSPICEG (de) KIETVPAIWHK_	SIGEVN (1) FTATAEAQSPICEG (1) KISIGEVN (95.82) FTATAEAQSPICEG	6	4	882	1	1
IPI00308971	2078	ETVIVTYSKGYPCGGNKATASSVIEITCAK	1	87.1601	87.16	87.16	_GYPCGGN (de) KTASSVIEITCAK_	GYPCGGN (87.16) KTASSVIEITCAK	7	3	705	1	1
IPI00119063	3334	PTNFYIGDGRCTVSNCTASQVFCVCKNDKIP	1	63.8937	216.27	63.894	_TCVSN (de) CTASQVFCVCKN (de) DK_	TCVSN (1) CTASQVFCVCKN (1) DK	5	3	674	1	1
IPI00408895	110	IGDSRRQPEKTDIAEINETARPISPVPNKIEK	0.999998	57.0046	111.77	111.77	_TDAEIN (de) ETARPISPVPNK_	TDAEIN (1) ETARPISPVPNK	6	2	977	1	1
IPI00123342	222	TATAISYGFVRKIDINSTAQNVFMDFMGSGS	0.998752	29.0339	78.128	78.128	_DIN (de) STAQNV (ox) FYDM (ox) GSGSTVCTIIVTYQTVK_	DIN (0.999) STAQNV (0.001) VMFYDMGSDIN (29.03) STAQN (-29.03) VMFYD	3	3	1122	1	1
IPI00400073	44	CRRIQEGHEYDFTDINDTAQCFCKGQSEHS	1	141.072	141.07	141.07	_RIQEGHEYDFTDIN (de) DTAQCFCK_	RIQEGHEYDFTDIN (1) DTAQCFCK	14	3	897	1	1
IPI00626555	266	FGEDYPGVNPIDHTNVAPQASMMFQYFVK	0.999305	31.5762	110.55	110.55	_HISFGEDYPGVNPIDHTN (de) VTAPQASM (ox) M (ox) FQYFVK_	HISFGEDYPGVNPIDHTN (0.001) PIDHTN (0.915) HISFGEDYPGVNPIDHTN (-31.58) PIDHTN (	19	4	972	1	1
IPI00400016	1221	SAEAYNIIRITLAGENQATEIEENRKYEQ	1	111.448	239.58	111.448	_TIAGEN (de) QTAIEIEEINR_	TIAGEN (111.45) QTAIEIEEIN (-11	6	2	951	1	1
IPI00129903	681	SIKTIIEGQVFPANPANTAHITPYKFEYHYR	1	114.507	184.6	114.507	_TIEGQVFPAN (de) FTAHITPYK_	TN (-114.06) IEGVFPAN (114.06)	13	3	820	1	1
IPI00118333	288	TGVMRASFSSREADNHAFIRIKTNASDST	1	103.083	103.08	103.08	_EADN (de) HTAFIR_	EADN (103.08) HTAFIR	4	2	588	1	1
IPI00226563	144	VAGVQDRVWDTAAANRTAEPNITQSERQIA	1	90.827	90.827	90.827	_VWDTAAAN (de) R_	VWDTAAAN (90.83) R	9	2	559	1	1
IPI00130117	515	RFHGKVPVEIGINYNITADVAKKEGQIPR	0.988969	19.5439	142.94	142.94	_NVPVEIGINYN (de) ITADVAQK_	NVPVEIGIN (0.011) YN (0.989) ITADVN (-43.28) VPEIGIN (-19.54) YN (	11	3	673	1	1
IPI00153389	149	RETEQYKEIKSWVQGNITACGRSIFIDEMD	1	80.3118	80.312	80.312	_SWVQGN (de) ITACGR_	SWVQGN (80.31) ITACGR	6	2	675	1	1
IPI00330714	165	RVDNFRVITGELFTFNNTAAQPVYKFEFPD	1	52.8241	182.49	52.824	_TGEIFTFN (de) TTAAPQPVYKFEFPDGVDSVIVK_	TGEIFTFN (1) TTAAPQPVYKFEFPDGVDSVIVK	8	3	1172	1	1
IPI00323053	311	EWTKNIDFRKCNNDNI SYVHCPEPNATK	0.947235	12.5679	122.44	122.44	_KCNSDN (de) ISYVHCPEPN (de) NTK_	KCN (0.053) SDN (0.947) ISYVHCPEPN (-12.57) SDN (12.57) ISYVHC	6	3	809	1	1
IPI00136642	188	IVSANRIFDGSITFNESYQDVEVYVYGAKI	1	90.7179	317.58	90.718	_SITFN (de) ESYQ (de) DVSEVYVYGAK_	SITFN (90.72) ESYQDVEVYVYGAK	5	2	1069	1	1
IPI00165730	520	NAENAI SARSDINPANGSYPFQAHQRAHGG	1	63.6823	200.77	63.682	_SDIN (de) PAN (de) GSYFPAHQHQR_	SDIN (1) PAN (1) GSYFPAHQHQR	7	3	673	1	1
IPI00154056	133	IAGFPNEVQHFNPNISWQPVPVHTVPIETE	0.881192	8.07688	99.357	99.357	_TIM (ox) SAEANIAIGFPNEVQHFN (de) PN (de) ISWQPVPVHTVPIETEDR_	TIMSANEANIGFPN (0.237) EVQHFN/TIMSANEAN (-39.32) IAGFPN (-8.	24	4	1150	1	1
IPI00129304	416	MQQDMRSKIDTEVANSVMEEMKIVDSKH	1	59.3449	107.5	59.345	_SKIDTEVAN (de) ISVVM (ox) EEM (ox) K_	SKIDTEVAN (1) ISVVM (1) EEM (1) K	9	3	686	1	1
IPI00123223	871	HTSSWIIVTKSNVNFNSAEAAQSSPEPG	1	66.3652	209.37	66.365	_SIGN (de) VN (de) FSVSAEAQSSPEPGSEVATVETGRK_	SIGN (1) VN (1) FSVSAEAQSSPEPGSEVATVETGRK	6	3	1142	1	1
IPI00405742	127	CGSIFPKGICAIRAMNSISVRIFYEDGSEKS	1	179.372	179.37	179.37	_AMSN (ox) SN (de) ISVR_	AMSN (1) ISVR	2	4	448	1	1
IPI00321348	461	AGTVYVGTETASII CNISVRGPPGIRIAAS	1	181.707	181.71	181.71	_GETASII CN (de) ISVR_	GETASII CN (181					













IP100648288	661	PCSKHDFVFCGFIICTNITRAPRIGQIQEII	1	101.532	101.53	101.53	_HDVFCGFIICTN(de)ITR_	HDVFCGFIICTN(1)ITR	HDVFCGFIICTN(101.53)ITR	12	3	619	1
IP100153840	67	SIVVQNPQRQTIFFNNGTRAIKDERFQIEEF	1	72.3207	98.04	72.321	_QTIFFN(de)GTR	QTIFFN(1)GTR	QTIFFN(72.32)GTR	6	2	543	1
IP100136280	320	ERTFNKIFIRPFMQYNSTRAGVDEEDTIR	1	116.546	116.55	116.55	_FIRPFM(ox)QYN(de)STR_	FIRPFMQYN(1)STR	FIRPFMQYN(116.55)STR	9	3	526	1
IP100649911	294	RQNDIKIKGMSSETISNITQRISITESHVVAI	1	104.41	111.79	104.41	_IKGM(ox)SETISN(de)ITQR_	IKGMSSETISN(1)ITQR	IKGMSSETISN(104.41)ITQR	10	3	532	1
IP100458413	3465	RGPPDFSVVQYQDTEENETQAIIVDGDQDKVI	1	44.9549	71.623	44.955	_GPPDFSVVQYQDTEEN(de)ETQAIIVDGDQDKVIISGIEPK_	GPPDFSVVQYQDTEEN(1)ETQAIIVDGDQDKVIISGIEPK	GPPDFSVVQYQDTEEN(44.95)ETQAIIVDGDQDKVIISGIEPK	15	4	1025	1
IP100458393	520	SGAAAYIEQASSHIGNSTQAARVAVGRPP	1	57.7348	57.735	57.735	_EIGGAIIDSGAAAYIEQASSHIGN(de)STQAARVAVGRPP	EIGGAIIDSGAAAYIEQASSHIGN(1)STQAARVAVGRPP	EIGGAIIDSGAAAYIEQASSHIGN(57.735)STQAARVAVGRPP	23	3	992	1
IP100129158	297	EDIQIWIENGVSRNDTPKNTKNTDGTYS	1	49.0765	119.79	49.076	_FYPEDIQIWIEN(de)GN(de)VSRN(de)DTPKN(de)ITK_	FYPEDIQIWIEN(1)GN(1)VSRN(1)DYPEDIQIWIEN(49.08)GN(49.08)	FYPEDIQIWIEN(1)GN(1)VSRN(1)DYPEDIQIWIEN(49.08)GN(49.08)	19	3	1070	1
IP100110808	103	IAYDKANIDVMKERSANTPDANVAPEVTVIS	0.333333	0	89.374	89.374	_ERSN(de)NTPDANVAPEVTVISR_	ERSN(0.333)N(0.333)TPDAN(0.33)ERSN(0)N(0)TPDAN(0)VAPEVTVIS	ERSN(0.333)N(0.333)TPDAN(0.33)ERSN(0)N(0)TPDAN(0)VAPEVTVIS	4	3	724	1
IP100468674	657	RIQYSRDTKXIFISINVTNSPSSQRAGEDAH	1	84.8919	84.892	84.892	_IFISIN(de)VTN(de)SPSSQ(de)R_	IFISIN(1)VTN(1)SPSSQR	IFISIN(84.89)VTN(84.89)SPSSQR	6	2	833	1
IP100111908	324	YKMSMANRQGNQPVINITNRQAFITAQNHGY	0.999967	44.7697	132.79	132.79	_GQNPQVIN(de)ITNR_	GQNPQVIN(1)ITNR	GQNPQVIN(44.77)ITN(-4	8	2	678	1
IP100116945	251	PGVYTRVSSYRMWIENITNGMNTS	0.953196	13.0131	88.101	88.101	_M(ox)WIEN(de)ITN(de)GNM(ox)TS_	M(ox)WIEN(0.953)ITN(0.983)GN(0.06)MWIEN(13.01)ITN(17.54)GN(-13	M(ox)WIEN(0.953)ITN(0.983)GN(0.06)MWIEN(13.01)ITN(17.54)GN(-13	5	2	773	1
IP100131116	203	YETKRCKMTIIEAGNMTKVDCTSGFKHEH	0.973166	15.595	78.486	78.486	_TM(ox)TIEAGN(de)NTM(ox)K_	TMTIIEAGN(0.973)N(0.027)TMK	TMTIIEAGN(15.6)N(-15.6)TMK	9	2	729	1
IP100222819	648	VMYPRGYPYNGTVNVTMHIRSPI TRAAVI	0.9982	26.6113	99.044	99.044	_GYPYNGTVN(de)VTN(de)VTM(ox)HIR_	GYPYNGTVN(0.175)VTN(0.827)VTM(0.96)GYPYNGTVN(6.78)VTN(26.6113)	GYPYNGTVN(0.175)VTN(0.827)VTM(0.96)GYPYNGTVN(6.78)VTN(26.6113)	11	2	1009	1
IP100111228	617	STVADAYRFINHVTGNKTKVEEGYVYNNFD	1	89.8046	89.805	89.805	_FIN(de)HTVGN(de)KTK_	FIN(1)HTVGN(1)KTK	FIN(89.8)HTVGN(89.8)KTK	8	2	631	1
IP100622572	249	KVTSSRRFIASFVNVTNKRKADGKRCMLCT	0.99917	30.807	136.93	136.93	_FIASFVNVTN(de)TKTKR_	FIASFVN(0.001)VTN(0.999)TKTKR	FIASFVN(0.001)VTN(0.999)TKTKR	9	3	500	1
IP100129158	302	IWIENGVSRNDTPKNTKNTDGTYSIF	1	49.0765	119.79	49.076	_FYPEDIQIWIEN(de)GN(de)VSRN(de)DTPKN(de)ITK_	FYPEDIQIWIEN(1)GN(1)VSRN(1)DYPEDIQIWIEN(49.08)GN(49.08)	FYPEDIQIWIEN(1)GN(1)VSRN(1)DYPEDIQIWIEN(49.08)GN(49.08)	24	3	1070	1
IP100468814	353	SRYQTVVSSNIDGPNVCTKIIIGNDPIITGI	0.999999	60.1623	161.35	161.35	_YQTVVSSNIDGPNVCTKIIIGNDPIITGI	YQTVVSSNIDGPNVCTKIIIGNDPIITGI	YQTVVSSNIDGPNVCTKIIIGNDPIITGI	14	3	650	1
IP100338785	1535	ADEAKQNAQVDIKNATKEKVDKSNEDNIR	1	68.4106	112.17	112.17	_QNAQVDIKNATKEKVDKSNEDNIR	QNAQVDIKNATKEKVDKSNEDNIR	QNAQVDIKNATKEKVDKSNEDNIR	11	3	516	1
IP100127407	539	VFSNPEWKEKYIHENYTKAIAKGVETPCP	1	89.3546	104.2	104.2	_YIHEN(de)YTK_	YIHEN(1)YTK	YIHEN(89.35)YTK	5	2	535	1
IP100123658	134	RNIWTEESKQYCTEQNATIVKASQSTLDYI	1	115.342	115.34	115.34	_QYCTEQN(de)ATIVK_	QYCTEQN(1)ATIVK	QYCTEQN(115.34)ATIVK	7	2	728	1
IP100124725	91	EVSFDVEIPKTAFTNFTIITDGVYTPGNVK	1	104.276	132.01	132.01	_TAFITN(de)FTIITDGVYTPGNVK_	TAFITN(1)FTIITDGVYTPGNVK	TAFITN(104.28)FTIITDGVYTPGNVK	6	2	1137	1
IP100115762	478	EGTTVIQDERFFPYANGTISIRD IQANDTGR	1	84.1687	84.169	84.169	_FFPYAN(de)GTISIRD_	FFPYAN(1)GTISIRD	FFPYAN(84.17)GTISIRD	6	2	694	1
IP100378635	122	KAPSFERGVYVETHNKTISIKTINAMQOMS	1	133.807	133.81	133.81	_GVYVETHN(1)N(1)K_	GVYVETHN(133.81)N(133.81)K	GVYVETHN(133.81)N(133.81)K	9	2	589	1
IP100125262	301	FAKWAKHRIVFTHPNWTIS	1	91.5493	91.549	91.549	_VFTHPN(de)WTIS_	VFTHPN(1)WTIS	VFTHPN(91.55)WTIS	7	2	658	1
IP100322542	196	QGCVEWTHRYIRIGNETIQRSDDPPKAHVTH	1	111.455	111.46	111.46	_IGN(de)ETIQR_	IGN(1)ETIQR	IGN(111.46)ETIQR	3	2	466	1
IP100322867	750	ISSPSTDFQIEVTPQNTINPSSSGSMFSWR	0.975524	16.005	118.57	118.57	_IGISSPSTDFQIEVTPQN(de)ITINPSSSGSMFSWR_	IGISSPSTDFQIEVTPQN(0.976)ITIN(1)IGISSPSTDFQIEVTPQN(16)ITIN(-	IGISSPSTDFQIEVTPQN(0.976)ITIN(1)IGISSPSTDFQIEVTPQN(16)ITIN(-	18	4	901	1
IP100471264	49	DMQWNYAPGRNVLTNQTINNDTVASSFIKS	0.994565	23.1219	119.08	119.08	_NQVIN(de)QTINN(de)DTVASSFIK_	NQVIN(0.995)QTIN(0.209)N(-23.12)VTIN(23.12)QTIN(-5.	NQVIN(0.995)QTIN(0.209)N(-23.12)VTIN(23.12)QTIN(-5.	5	3	694	1
IP100272690	700	IEGSKIIEKSTEVSNTIKYTRAKTDFVS	1	107.026	107.03	107.03	_STEVSN(de)HTIK_	STEVSN(1)HTIK	STEVSN(107.03)HTIK	6	2	559	1
IP100229935	28	TISVQGTVAEQKCNFTIIESRVSSISASI	1	90.9131	90.913	90.913	_CN(de)FTIIESR_	CN(1)FTIIESR	CN(90.91)FTIIESR	2	2	571	1
IP100400016	1173	ANVSITQPESTGEPNMTIIAEARIAERH	0.501354	0	49.793	49.793	_M(ox)AAAN(de)VSITQPESTGEPN(de)NM(ox)TIIAEAR_	MAAAN(0.997)VSITQPESTGEPN(0.5)MAAAN(22.65)VSITQPESTGEPN(0)	MAAAN(0.997)VSITQPESTGEPN(0.5)MAAAN(22.65)VSITQPESTGEPN(0)	19	3	994	1
IP100471089	131	CPEIPDKTISICDSDANCTIGSSDTHSSGIGT	1	73.9806	73.981	73.981	_TSCDSDAN(de)CTIGSSDTHSSGIGTGR_	TSICDSDAN(1)CTIGSSDTHSSGIGTGR	TSICDSDAN(73.98)CTIGSSDTHSSG	9	3	886	1
IP100124497	114	NHKIQQEPGIIIGPGNSTIFIERVTEDEGV	1	91.4006	91.401	91.401	_IQQEPGIIIGPGN(de)STIFIER_	IQQEPGIIIGPGN(1)STIFIER	IQQEPGIIIGPGN(91.4)STIFIER	13	3	728	1
IP100757771	228	GEYHCYHFVSAPKANATIEVKAAPDITGHK	1	108.433	110.87	110.87	_AN(de)ATIEVK_	AN(1)ATIEVK	AN(108.43)ATIEVK	2	2	424	1
IP100279010	314	QQTQEEQINNVNKTGNITIERVHRNQSIGY	1	120.457	120.46	120.46	_GN(de)ITIER_	GN(1)ITIER	GN(120.46)ITIER	2	2	402	1
IP100808296	454	NYIIESNITSDAHKGNSTIAVPRKRDADAPK	1	162.358	162.36	162.36	_GN(de)STIAVPK_	GN(1)STIAVPK	GN(162.36)STIAVPK	2	2	444	1
IP100466999	256	TSKGVITWIPNHSNGTIAAPVVPIDIDE	0.48249	0	78.978	78.978	_VITWIPN(de)HISNGTIAAPVVPIDIDEDGVR_	VITWIPN(0.035)PN(0.482)HISN(0.4)VITWIPN(-11.39)PN(0)HISN(0)GT	VITWIPN(0.035)PN(0.482)HISN(0.4)VITWIPN(-11.39)PN(0)HISN(0)GT	12	3	1109	1
IP100118250	388	DPISISPGTPPPINNSTRHQMSSPSTVKI	0.986506	18.5799	52.03	52.03	_SNASDDPISISPGTPPPINN(de)N(de)STHR_	SN(0.027)ASDDPISISPGTPPPINN(0)SN(-18.58)ASDDPISISPGTPPPINN	SN(0.027)ASDDPISISPGTPPPINN(0)SN(-18.58)ASDDPISISPGTPPPINN	21	3	864	1
IP100127556	445	ASIHWRREKIIIPAKNTHIHKSHVGRKMI	1	86.8981	86.898	86.898	_IIPAKN(de)THHK_	IIPAKN(1)THHK	IIPAKN(86.9)THHK	7	3	451	1
IP100268030	132	SWAQHESRTFAVYINSTGYRTAFPGKYINE	1	73.8478	73.848	73.848	_TFAVYN(de)STGYR_	TFAVYN(1)STGYR	TFAVYN(73.85)STGYR	7	2	697	1
IP100119035	333	CGGNIIGVRYIYHANQTGYDPPSSRYDAIC	1	70.9421	70.942	70.942	_TVYIHAN(de)QTGYDPPSSR_	TVYIHAN(1)QTGYDPPSSR	TVYIHAN(70.94)QTGYDPPSSR	7	2	954	1
IP100273133	104	ARPYCKVILIAQTHANNTGSYHYCYKIKAR	0.946259	12.4571	66.022	66.022	_VILIAQTHAN(de)NTGSYHYCYK_	VILIAQTHAN(0.946)N(0.054)TGSYVILIAQTHAN(12.46)N(-12.46)TG	VILIAQTHAN(0.946)N(0.054)TGSYVILIAQTHAN(12.46)N(-12.46)TG	10	3	785	1
IP100405543	196	FIDPEGSQVDTIEGNITIASFPDFEIPSN	0.876322	8.57533	128.22	128.22	_ETVITFIDPEGSQVDTIEGN(de)ITGIASFDFEIPSNPK_	ETVITFIDPEGSQVDTIEGN(0.122)N(ETVITFIDPEGSQVDTIEGN(-8.58)N	ETVITFIDPEGSQVDTIEGN(0.122)N(ETVITFIDPEGSQVDTIEGN(-8.58)N	21	4	1024	1
IP100308971	1305	ISQKIFPENGIIKMNVTGGDCHKYVQRST	1	80.5221	80.522	80.522	_M(ox)N(de)YGGDCHK_	MN(0.52)YGGDCHK	MN(80.52)YGGDCHK	2	2	651	1
IP100223446	1361	KKFYFGGSPISQYANFTGCSINAFYTRIDR	0.999792	36.8127	69.27	69.27	_FYFGGSPISQYAN(de)FTGCSINAFYTR_	FYFGGSPISQYAN(1)FTGCSINAFYTR	FYFGGSPISQYAN(36.81)FTGCSIN	14	3	989	1
IP100122584	265	KQIFAPRQEEFHQRANVTIISKFHWCCHH	1	110.387	110.39	110.39	_AN(de)VTFTISK_	AN(1)VTFTISK	AN(110.39)VTFTISK	2	2	491	1
IP100420835	958	GIDSKASVIRSRNWNSTIEEYSKINYIDI	1	110.306	110.31	110.31	_IWN(de)STFIEEYSK_	IWN(1)STFIEEYSK	IWN(110.31)STFIEEYSK	3	2	759	1
IP100122493	69	CPREVMQDFVRHYHNGTFEDGKFRDSSYDR	1	102.4	102.4	102.4	_YHYN(de)GTFEDGKK_	YHYN(1)GTFEDGKK	YHYN(102.4)GTFEDGKK	4	2	730	1
IP100223446	780	SAYNTAVDSARDAVRNIIEVVPQIIDQIRTV	1	112.667	112.67	112.67	_DAVRN(de)ITEVVPQIIDQIR_	DAVRN(1)ITEVVPQIIDQIR	DAVRN(112.67)ITEVVPQIIDQIR	5	3	694	1
IP100114844	83	NINKMTSGDGETANATEVKKITQPKNI	1	78.95	115.73	115.73	_TM(ox)TSGDGETAN(de)ATEVKK_	TMTSGDGETAN(1)ATEVKK	TMTSGDGETAN(78.95)ATEVKK	12	2	927	1
IP100120793	196	ITIKQHTVTTTKGENFTEDVMMERVVEQ	1	73.4483	73.448	73.448	_QHTVTTTKGEN(de)FTETDVK_	QHTVTTTKGEN(1)FTETDVK	QHTVTTTKGEN(73.45)FTETDVK	12	2	1070	1
IP100223987	682	EYRSVSIIDKKSVDVINITEQVQVWVYNSMT	1	159.128	159.13	159.13	_SDVIN(de)ITEQVQVWV_	SDVIN(1)ITEQVQVWV	SDVIN(159.13)ITEQVQVWV	5	2	830	1
IP100756745	2644	GIFTYQIDEDRRHMQNIIEEQIEVKKIFVYI	1	123.758	123.76	123.76	_HM(ox)QN(de)ITEEQIEVKK_	HMQN(1)ITEEQIEVKK	HMQN(123.76)ITEEQIEVKK	4	2	857	1
IP100808422	167	CSGYVQIEVCRGSPANVTEARISFYSHSGSF	1	94.4653	94.465	94.465	_GSPAN(de)VTEAR_	GSPAN(1)VTEAR	GSPAN(94.47)VTEAR	5	2	502	1
IP100153202	546	QAAKNGSHKCDISNSSTEAGQKIIKMSIG	1	83.2035	83.204	83.204	_CDISN(de)STEAGQK_	CDISN(1)STEAGQK	CDISN(83.2)STEAGQK	5	2	656	1
IP100132927	53	EIKATGTAHFFNFINTDYRITIKDDEHDR	0.997283	25.6476	119.4	119.4	_ATGTAHFFNFIN(de)TTDYR_	ATGTAHFFN(0.003)FIIN(0.997)TTIATGTAHFFN(-25.65)FIIN(25.65)	ATGTAHFFN(0.003)FIIN(0.997)TTIATGTAHFFN(-25.65)FIIN(25.65)	13	3	697	1
IP100130627	93	SEENFTPGVILNRPNGTDVYKVIDYTGTE	0.930819	11.437	59.426	59.426	_N(de)GIPDEQILVM(ox)M(ox)YDDIANSEENFTPGVILNRPN(de)GTDVYK_	N(0.993)GIPDEQILVM(ox)M(ox)YDDIANSEENFTPGVILNRPN(0)CN(25.04)GIPDEQILVMYDDIAN(-2	N(0.993)GIPDEQILVM(ox)M(ox)YDDIANSEENFTPGVILNRPN(0)CN(25.04)GIPDEQILVMYDDIAN(-2	33	4	1089	1
IP100312058	481	HIKDAQIFIQKKAVKNFVDVHPDYGARQIAI	1	57.1063	79.492	79.492	_N(de)FTDVHPDYGAR_	N(57.11)FTDVHPDYGAR	N(57.11)FTDVHPDYGAR	1	2	697	1
IP100319200	39	RQPTFVVPKDKITSNITDQIAEAYIYRV	1	177.555	177.56	177.56	_TSN(de)ITDQIAEAYIYR_	TSN(1)ITDQIAEAYIYR	TSN(177.56)ITDQIAEAYIYR	3	2	930	1
IP100120225	765	TMSRSRNTVADYINIIEEPEFETEYPPFE	1	81.9736	81.974	81.974	_SRN(de)ITVADYIN(de)ITDPEEFETEYPPFESR_	SRN(1)ITVADYIN(1)ITDPEEFETEYPPFESR(81.97)ITVADYIN(81.97)ITD	SRN(1)ITVADYIN(1)ITDPEEFETEYPPFESR(81.97)ITVADYIN(81.97)ITD	11	3	1121	1
IP100315576	372	VWQPGSGYSSITAIENSTGDKGPPQIFVYI	1	148.286	148.29	148.29	_VWQPGSGYSSITAIEN(de)STDGK_	VQWPGSGYSSITAIEN(1)STDGK	VQWPGSGYSSITAIEN(148.29)ST	18	2	1198	1
IP100221669	653	WHWPINQGRFSGANDTDFRVYIIGNPVVW	1	91.9612	132.32	132.32	_FSGAN(de)TDFRV_	FSGAN(1)TDFRV	FSGAN(91.96)TDFRV	5	2	566	1
IP100128336	259	KHIRAVGDEFERSQHINSTDAADKMAPEDWT	1	66.0043	95.651	95.651	_SQHIN(de)STDAADK_	SQHIN(1)STDAADK	SQHIN(66)STDAADK	5	2	644	1
IP100222321	136	TCVDQIKPQRNFVINMTRCFQWIPETDYE	1	72.9817	92.538	92.538	_NFVIN(de)M(ox)TCR_	NFVIN(1)MTCR	N(-72.98)NFVIN(72.98)MTCR	5	2	586	1
IP100121254	210	IKQPEVSNVTRNTAFNITCQAVGPPPEVINI	0.957167	13.5226	137.52	137.52	_NTAFN(de)ITCQAVGPPPEVINIFWQVQ(de)SSR_	N(0.043)TAFN(0.957)ITCQAVGPPPEVIN(-13.52)TAFN(13.52)ITCQAVG	N(0.043)TAFN(0.957)ITCQAVGPPPEVIN(-13.52)TAFN(13.52)ITCQAVG	5	3	1017	1
IP100129158	168	EVSGPADRGIPDQKVNFTCKSHGFSRNIIT	1	88.0206	93.011	93.011	_GIPDQKVN(de)FTCK_	GIPDQKVN(1)FTCK	GIPDQKVN(88.02)FTCK	8	2	704	1
IP100126316	242	WTQDRMWRKNRSRQNSTCIGTDINRNF											



Table S5. Identified deglycosylated glycopeptides

## PNP Strategy 1

## De-glycopeptides Sequence

De-glycopeptides Sequence	Mass	Proteins	Leading r:	Unique (C	Unique (F	Charges	PEP	Score
YYQSIYDTAENIN(deVTYPEWQSPEEDINFVTDATAK	4042.8273	IPI00118674	IPI00118674	yes	yes		4 0.0059081	46.415
YYN(deYTISINGK	1334.6507	IPI0022142E	IPI0022142E	yes	yes		2 3.5626E-34	199.82
YYN(deQSAGGSHTIQWMAGCDVESDGR	2788.1606	IPI0098582E	IPI0098582E	yes	no	2,3,4	8.9548E-80	214.14
YYN(deFSVFQIDAPSFAYIK	2172.0568	IPI00377727	IPI00377727	yes	no	2,3	2.9196E-06	123.02
YYHGEISYIN(deVTRK	1741.8788	IPI00404551	IPI00404551	yes	no	2,3,4	1.8766E-32	194.59
YYHGEISYIN(deVTR	1613.7838	IPI00404551	IPI00404551	yes	no	2,3	3.7582E-43	203.7
YWGN(deITVVMGEHDFSEKDGDEQVR	2810.2606	IPI0030789C	IPI0030789C	yes	yes		3 0.014194	60.602
YWGIIHQAFVQN(deGTVSK	1947.0003	IPI00222967	IPI00222967	yes	no		3 0.0035835	75.316
YVYVADIIAHEIHVIEKQPNMN(deITQIK	3178.6849	IPI00310567	IPI00310567	yes	yes	3,4	7.9393E-22	124.69
YVVVSTPEKSQITISNIDVN(deVDPGTYVCNATNAQGTTR	4111.0168	IPI0040849E	IPI0040849E	yes	no		4 1.5572E-14	89.99
YVMIPVADQDKCVVHYEN(deSTVPEKK	2948.4412	IPI0040914E	IPI0040914E	yes	yes	3,4	3.5201E-24	146.15
YTSFEYPKNISFACNPGFFIN(deGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no	2,3,4	1.587E-88	211.64
YTSFEYPKN(deISFACNPGFFINGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no	2,3,4	1.587E-88	211.64
YTSDPN(deVTSVGPSPK	1450.694	IPI0022999E	IPI0022999E	yes	yes		2 0.0018208	106.42
YTGN(deASAIIPDQGR	1687.8893	IPI0013183C	IPI0013183C	yes	no	2,3	1.6755E-59	185.27
YTGN(deASAIIPDQGR	1721.8737	IPI0013563E	IPI0013563E	yes	no	2,3	5.6048E-05	133.48
YSVQHMYFTYN(deISDTEHFPNAISK	2891.3225	IPI0046921E	IPI0046921E	yes	yes	2,3,4	2.4947E-34	170.14
YSQAAN(deSTKEIDDCEQANK	2170.9437	IPI0018735E	IPI0018735E	yes	yes		2 5.2847E-32	184.83
YSNESQDISVNGYN(deCTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes		3 2.8527E-14	120.33
YSN(deESQDISVNGYNCTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes		3 2.8527E-14	120.33
YSIYKDPAGWISINPIN(deGTVDTTAVIDR	3078.5662	IPI0012374E	IPI0012374E	yes	yes		3 1.0281E-25	133.15
YRAEFAVAN(deDTGFVDIPQKEK	2397.1601	IPI00128154	IPI00128154	yes	no	2,3	2.9192E-15	140.28
YQTVDSNIDGFVN(deCTK	1946.868	IPI00468814	IPI00468814	yes	yes	2,3	1.7955E-14	161.35
YQTINC(deSVNVR	1352.6507	IPI0042083E	IPI0042083E	yes	no		2 0.019282	69.815
YQMDN(deVSSIVQIIGSHIEDVNADIIQTK	3129.5652	IPI00330594	IPI00330594	yes	yes	3,4	7.4347E-49	176.9
YQHVGQVIFQAPEAGGRWN(deQTQK	2754.399	IPI0089497E	IPI0089497E	yes	no		4 7.8116E-07	93.684
YQFNTNVVFSND(deGTIVDRYR	2407.1557	IPI0032137E	IPI0032137E	yes	no		3 0.026005	63.337
YQFNTNVVFSND(deGTIVDR	2087.9912	IPI0032137E	IPI0032137E	yes	no		3 1.6886E-11	135.09
YQFEVICPAPRPGAASN(deISFQAPFR	2822.3963	IPI0031115E	IPI0031115E	yes	yes		3 1.9596E-05	84.975
YQEIIIESSIN(deKTQWK	2108.079	IPI0099093E	IPI0099093E	yes	no		2 4.1899E-14	162.77
YQEGDITIYVINIHN(deVTK	2119.095	IPI0017009E	IPI0017009E	yes	no	2,3	5.5086E-11	153.36
YPTPGEAPGVVGNFN(deK	1645.81	IPI00112614	IPI00112614	yes	yes		3 0.012355	117.07
YPQDYQFYIQN(deFTAIPINTVPPQR	3011.5181	IPI0011085E	IPI0011085E	yes	no	2,3,4,5	1.5762E-25	149.44
YPNN(deGSIVWGK	1233.6142	IPI0084869E	IPI0084869E	yes	yes		2 0.0062013	83.081
YPHKPEIN(deSTTHPGADIKENFCR	2710.2922	IPI0011420E	IPI0011420E	yes	yes		3 6.5881E-09	114.55
YPHKPEIN(deSTTHPGADIK	2004.0065	IPI0011420E	IPI0011420E	yes	yes	2,3	1.3155E-14	163.8
YN(deHTGQVVIYK	1320.6826	IPI00466371	IPI01026704	no	no	2,3	2.6863E-11	167.2
YMN(deYTSIITFHCK	1676.7691	IPI00308971	IPI00308971	yes	yes		3 0.0025961	127.56
YMGPIPEDNIDHYRN(deSTVMSR	2607.221	IPI0012581E	IPI0012581E	yes	no	2,3	3.4764E-08	106.16
YMDQNSDQWQDGVGYIN(deSSEGAVGR	2704.146	IPI0011423E	IPI0011423E	yes	no		3 8.2446E-08	97.509
YMAIAN(deR	950.50077	IPI00123814	IPI00123814	yes	yes		2 0.010808	110.63
YKYETTISPTSNISSNSFICIEN(deR	2823.3385	IPI0062583E	IPI0062583E	yes	no	3,4	8.5795E-80	184.68
YKYETTISPTS(deISSNSFICIENR	2823.3385	IPI0062583E	IPI0062583E	yes	no	3,4	8.5795E-80	184.68
YKGTAGNAIMDGASQIVGEN(deR	2151.0379	IPI0027907E	IPI0027907E	yes	yes	2,3	9.2831E-59	207.43
YKGN(deASAIIPDQGR	1748.921	IPI0012807E	IPI0012807E	yes	yes	2,3	0.0001963	131.18
YKGIN(deITEDTYKPR	1696.8784	IPI0011980E	IPI0011980E	yes	yes	2,3,4	0.014851	100.38
YIYIASN(deHSNK	1308.6463	IPI0011817E	IPI0011817E	yes	no	2,3	0.0038245	91.313
YITMGGKN(deFTR	1286.6441	IPI00848991	IPI00848991	yes	no		2 0.0093052	92.866
YIQVVYIHNNN(deISAVGQNDFCR	2623.2602	IPI0012319E	IPI0012319E	yes	yes		3 2.2358E-25	163.79
YIQPIAVQFTN(deITVDTEIRVECK	2849.4997	IPI0012155C	IPI0012155C	yes	yes		3 0.0024792	70.452
YIQPIAVQFTN(deITVDTEIR	2333.2631	IPI0012155C	IPI0012155C	yes	yes	2,3	4.4772E-20	288.25
YINSFPHEN(deSTAFYGVNQFSYIFPEEFK	3374.556	IPI00453524	IPI00453524	yes	yes		3 1.0847E-42	163.74
YIN(deFSTSEKEK	1344.6561	IPI0013501C	IPI0013501C	yes	no		2 0.0070005	97.214
YIN(deETQKITQKIK	1605.8726	IPI0012322E	IPI0012322E	yes	yes		2 0.0078744	110.51
YIN(deETQKITQK	1364.6936	IPI0012322E	IPI0012322E	yes	yes	2,3	6.3784E-11	162.68
YIMWGISSDIWGEKPN(deTSYIIGK	2657.32	IPI00323624	IPI00323624	yes	no		3 0.0001424	88.565
YIKNGN(deATIIR	1261.7143	IPI0098582E	IPI0010999E	no	no	2,3	8.699E-16	170.89
YIKNGN(deATIIR	1261.7143	IPI0098582E	IPI0010999E	no	no	2,3	8.699E-16	170.89
YIHEN(deYTK	1066.5084	IPI00127407	IPI00127407	yes	no		2 0.0127	104.2
YIEIGN(deETIIR	1319.7085	IPI00850057	IPI00850057	yes	no		2 2.3485E-13	160.22
YHYN(deGTIIDGTIFDSSYSR	2208.0124	IPI0013048E	IPI0013048E	yes	yes	2,3	5.3619E-08	123.19
YHYN(deGTIIDGTAFDSSYSR	2192.9763	IPI0012249E	IPI0012249E	yes	no	2,3	7.1162E-11	139.11
YHYN(deGTIFDGTIFDSSSHNR	2243.0032	IPI0013048E	IPI0013048E	yes	yes	2,3	5.4453E-11E	248.97
YHYN(deGTFEDGKK	1457.6575	IPI0012249E	IPI0012249E	yes	no		2 0.0044575	102.4
YHYN(deGTFEDGK	1329.5626	IPI0012249E	IPI0012249E	yes	no		2 0.040739	60.255
YHYN(deASIIDGTIIDSTWNIGK	2380.1699	IPI0013048E	IPI0013048E	yes	yes	2,3	0.0097125	61.276
YHHYSSN(deFSIPK	1478.6943	IPI0012948E	IPI0012948E	yes	no	2,3	9.3441E-24	187.85
YHGFIN(deTSYHR	1393.6527	IPI0015405E	IPI0015405E	yes	no		3 0.0027716	96.113
YHDYYITSTSN(deGSIEGIENR	2318.0451	IPI00130754	IPI00130754	yes	yes		3 0.0013354	81.157
YGTAIVHIYVNETIAN(deR	1933.0058	IPI00719927	IPI00719927	yes	no	2,3	0.0001309	112.8
YGTAIVHIYV(deETIANR	1933.0058	IPI00719927	IPI00719927	yes	no	2,3	0.0001309	112.8
YGQEQGTAPFQVSN(deHTGR	1975.9137	IPI0040939E	IPI0040939E	yes	yes	2,3	2.4576E-05	117.3
YGMQNSGNEAAWN(deYTIEQYQK	2494.0859	IPI0013458E	IPI0013458E	yes	yes	2,3	1.5762E-20	202.16
YGKN(deDSITITQIK	1479.7933	IPI0012342E	IPI0012342E	yes	no	2,3	1.4066E-42	201.48
YGIVVIDECPGVGIVIPQSFGN(deESIR	2817.4371	IPI0030923C	IPI0030923C	yes	no	2,3	5.3732E-26	149.41
YGHPNGTQGN(deSTMWPVFTSTEQK	2566.1547	IPI0013116E	IPI0013116E	yes	yes		3 1.2955E-08	108.18
YGHPN(deGTQGNSTMWPVFTSTEQK	2566.1547	IPI0013116E	IPI0013116E	yes	yes		3 1.2955E-08	108.18
YFTNRI(deDVSQNVSSDTDQSCESTK	2780.2195	IPI0012076E	IPI0012076E	yes	no		3 0.0064041	65.855
YFFIQSVSDSDGRN(deFTSSPPGQTQFK	2852.3406	IPI0034468E	IPI0034468E	yes	yes		3 3.5902E-33	167.51
YEVNWNQSTIDCVDPISIAAN(deR	2652.2126	IPI0011945E	IPI0033103E	no	no	2,3	1.5848E-18	142.23
YEVNWN(deQSTIDCVDPISIAANR	2652.2126	IPI0011945E	IPI0033103E	no	no	2,3	1.5848E-18	142.23
YEIQQN(deETR	1179.552	IPI0015405E	IPI0015405E	yes	no		2 0.0065213	106.29
YEQAQN(deISQDIEK	1564.7733	IPI0040001E	IPI0040001E	yes	no		2 0.0070182	131.96

YDVN(deRSDSGGSIQIEEGYFVHHFAPENIPTMSK	3723.7264	IPI00312711	IPI00312711	yes	no	3,4	8.653E-54	162.47
YDNHSSSVIAAVVFEHSFN(deHSQDPIPIAVK	3307.6262	IPI00153807	IPI00153807	yes	no	4	0.0001822	61.612
YDN(deHSSSVIAAVVFEHSFNHSQDPIPIAVK	3307.6262	IPI00153807	IPI00153807	yes	no	4	0.0001822	61.612
YDKSEVDGAAAMIN(deYTHIIMEAVPGHPAIYR	3431.6642	IPI0087485E	IPI0087485E	yes	no	4,5	1.3635E-17	110.94
YDIPASINYIIN(deK	1522.8031	IPI0012926E	IPI0012926E	yes	yes	2,3	2.2592E-23	186.46
YDIIINENGIISN(deVSEPARTAR	2514.333	IPI0022993E	IPI0022993E	yes	yes	3	3.098E-06	96.379
YAVYWN(deSSNPR	1355.6258	IPI00114364	IPI00114364	yes	no	2	0.0021036	99.215
YATENDISSIHNSTITCIVN(deQTTTSITGTSPEIMEK	3854.819	IPI0023031E	IPI0023031E	yes	no	3,4,5	2.7171E-26	115.47
YATENDISSIHN(deSTITCIVNQTTTSITGTSPEIMEK	3854.819	IPI0023031E	IPI0023031E	yes	no	3,4,5	2.7171E-26	115.47
YAFQEIIIGDISFIPTIN(deFSKYIR	2847.5211	IPI00122557	IPI00122557	yes	no	3	0.0026787	100.28
YAFQEIIIGDISFIPTIN(deFSK	2415.2726	IPI00122557	IPI00122557	yes	no	2,3	1.0722E-58	202.16
WVITAAHCIIYPPWDKN(deFTENDIIVR	3170.6012	IPI0011420E	IPI0011420E	yes	yes	3,4	2.0936E-05	81.665
WVGN(deWTYEIK	1294.6346	IPI0015314E	IPI0015314E	yes	yes	2	0.0042009	98.898
WVDGASIN(deFSHWNSGEPNDSR	2374.0363	IPI0022335E	IPI0022335E	yes	yes	3	0.0006262	82.865
WTGHN(deVTVVQR	1295.6735	IPI0011906E	IPI0011906E	yes	yes	2,3	0.0038245	91.313
WTDNTEYN(deNTIPIRGEER	2207.0243	IPI0027643C	IPI0027643C	yes	yes	2,3	0.0001353	112.82
WSFSN(deGTSWQK	1326.5993	IPI0031557E	IPI0031557E	yes	yes	2	0.0014542	103.43
WKPPSDPNGN(deITHYIVYWER	2471.2022	IPI0012835E	IPI0012835E	yes	no	3	1.7778E-05	107.72
WIIVGAPTASWISN(deASVVNPGAIYR	2641.4017	IPI00121334	IPI00121334	yes	no	3	0.0010075	69.259
WGHN(deVTEFQQR	1400.6585	IPI0075438E	IPI0075438E	yes	yes	2,3	0.0046836	88.338
WGEVDIIGN(deCSQFYPRDYEEK	2638.1798	IPI0032067E	IPI0032067E	yes	yes	3	0.02272	62.203
WGEVDIIGN(deCSQFYPR	2054.9156	IPI0032067E	IPI0032067E	yes	yes	2	1.2822E-10	154.49
WFHN(deESIIPHQDANYVIQSAR	2524.2248	IPI0016287C	IPI0016287C	yes	yes	3	0.0023516	72.421
WECKN(deDTIFGIK	1509.7286	IPI0012618E	IPI0012618E	yes	yes	2	0.0031429	124.12
WDPEPN(deCTSK	1232.5132	IPI0013001C	IPI0013001C	yes	no	2	0.045548	62.408
WASVVVPIGKEQN(deYTCR	2006.0044	IPI0010999E	IPI0010999E	yes	no	2,3	6.2904E-08	145.1
WAAVVVPIGKEQN(deYTCHVHHK	2472.2485	IPI00850057	IPI00850057	yes	no	3	0.0020874	81.428
VYVYAVN(deQTR	1211.6299	IPI00466371	IPI01026704	no	no	2	0.0061629	94.692
VYTYADTPNDFQISN(deFSIPEEDTKIKIPIIHHQAIK	4048.0833	IPI00108811	IPI00108811	yes	yes	4	2.9129E-07	71.927
VYTYADTPNDFQISN(deFSIPEEDTKIK	3034.4448	IPI00108811	IPI00108811	yes	yes	3,4	1.7971E-46	180.63
VYTYADTPNDFQISN(deFSIPEEDTK	2793.2657	IPI00108811	IPI00108811	yes	yes	2,3	4.8428E-29	157.01
VYTVSSSPSCYMYVYVN(deTTEVAIEQDIAYIQEIK	3962.8846	IPI0013601E	IPI0013601E	yes	yes	4	1.3754E-11E	215.08
VYSIPGREN(deYSSVDANGIQSQMISR	2770.3344	IPI0012710C	IPI0012710C	yes	yes	3	8.1416E-25	149.85
VYN(deGSVPFEER	1295.6146	IPI00265291	IPI00265291	yes	no	2	0.0029912	95.094
VYMKN(deVTVVIR	1320.7588	IPI0046921E	IPI0046921E	yes	yes	2,3	5.2957E-05	147.91
VYIN(deDSVEISR	1778.8799	IPI0012676E	IPI0012676E	yes	yes	2	0.000132	139.6
VYIN(deDSVEISR	1293.6565	IPI0012676E	IPI0012676E	yes	yes	2	0.022243	68.355
VYIHPFHIIYHN(deK	1679.8936	IPI0065406E	IPI0065406E	yes	yes	2,3	0.0027206	112.13
VYGGIVN(deQSEINEGTAFRR	2100.0276	IPI0041628E	IPI0041628E	yes	yes	2,3	4.0052E-65	211.09
VYEEVINV(deTPNDGFAK	1793.8836	IPI0062489E	IPI0062489E	yes	no	2	0.0029413	80.545
VWVCDRDNDVDSDEPAN(deCTQMTCGVDEFR	3706.4487	IPI0011906E	IPI0011906E	yes	yes	3,4	7.4716E-30	127.53
VWVCDRDNDVDSDEPAN(deDCVDSDEPANCTQMTCGVDEFR	3706.4487	IPI0011906E	IPI0011906E	yes	yes	3,4	7.4716E-30	127.53
VWPDYPN(deITVDPSIGWDHQVEQYR	2913.3722	IPI0084869E	IPI0084869E	yes	yes	3,4	1.3107E-24	144.27
VWPDGVIPFVIGGN(deFTGSQR	2145.1007	IPI0012518E	IPI0012518E	yes	no	2,3	6.6588E-13	143.83
VWN(deQTEQEPAAYHIISICFVR	2560.2533	IPI0012907E	IPI0012907E	yes	no	3	4.9123E-23	160.55
VWDTAAAIN(deR	1115.5724	IPI0022656E	IPI0022656E	yes	no	2	0.0079796	90.827
VVTPEEYFN(deVTIQ	1537.7664	IPI0013310E	IPI0013310E	yes	no	2,3	3.2488E-10	162.32
VVSVDISFRPIN(deETFPVVIETPKR	2904.5749	IPI0062466E	IPI0062466E	yes	yes	3,4,5	8.5805E-18E	187.59
VVSVDISFRPIN(deETFPVVIETPK	2748.4738	IPI0062466E	IPI0062466E	yes	yes	2,3,4	2.2613E-16E	264.92
VVRPDSEIGERPPEDN(deQSFQYDHEAFIGK	3358.5854	IPI00137831	IPI00137831	yes	yes	3,4	2.2061E-06	88.79
VVPEPNIVIN(deFSATAIR	1839.0254	IPI0065418E	IPI0065418E	yes	no	3	1.76E-06	130.27
VVN(deVSEIYGTPTCK	1565.7759	IPI0062695C	IPI0062695C	yes	no	2,3	4.6365E-10E	240.2
VVN(deSTTGTGEHIR	1369.695	IPI0013122E	IPI0013122E	yes	no	3	0.0029448	109.84
VVMDIPYEIWN(deETSAEVADIKK	2549.2723	IPI0011903E	IPI0011903E	yes	no	2,3,4	1.1415E-12	130.89
VVMDIPYEIWN(deETSAEVADIK	2421.1774	IPI0011903E	IPI0011903E	yes	no	2,3	9.1308E-15	135.38
VVIRPFYITN(deSTDMV	1753.9073	IPI0011980E	IPI0011980E	yes	no	2	6.184E-46	209.79
VVINFN(deGTSQEIMAVSEHR	2130.0528	IPI0011118E	IPI0011118E	yes	yes	3	3.9836E-06	114.59
VVIISGVEPRPPTPQVQFTIN(deASSEDHKKR	3200.6942	IPI0012297E	IPI0012297E	yes	no	4,5	0.0008354	70.994
VVIHPN(deHSVVDIGIIK	1739.0094	IPI0040914E	IPI0040914E	yes	yes	2,3,4	1.0873E-14E	259.96
VVIGEN(deITSNCPEVIYEIKEETPVFYK	3169.5893	IPI0067425E	IPI0067425E	yes	yes	3	9.675E-22	123.53
VVIAGSN(deMTICCMSPTK	1867.8664	IPI0011929E	IPI0011929E	yes	no	2,3	4.2273E-06	124.78
VVFISPAVPEEPEAYN(deITVIIR	2455.3363	IPI0040574E	IPI0040574E	yes	no	2,3,4	4.4966E-31	171.98
VVDKGN(deGSKPTSPEEVK	1769.9159	IPI0033063E	IPI0033063E	yes	no	2,3	0.0006528	114.63
VVAVSPAN(deSREER	1525.8213	IPI0022999E	IPI0022999E	yes	yes	3	0.017981	75.739
VVAVSPAN(deSR	1111.635	IPI0022999E	IPI0022999E	yes	yes	2	0.001462	103.34
VTTCHIPQQN(deATIYK	1772.888	IPI00410951	IPI00410951	yes	no	2,3	0.0005311	108.63
VTPVCN(deASIPAQR	1411.7242	IPI00762091	IPI00762091	yes	no	2,3	0.0035524	96.745
VTNSNANAAGPIIVAGYN(deVSGSVR	2330.1979	IPI0022242E	IPI0022242E	yes	yes	2,3	1.6259E-40	145.61
VTN(deSSEFMMNK	1286.5635	IPI0031413E	IPI0031413E	yes	no	2	0.0024139	91.914
VTIWWHPFVNYN(deSSSFGEGER	2523.2183	IPI0046425E	IPI0046425E	yes	yes	3	1.9257E-09	116.73
VTINNWWAN(deKTEGR	1600.8322	IPI0013664E	IPI0013664E	yes	yes	2,3	4.6385E-32	190.41
VTINNWWAN(deK	1157.6193	IPI0013664E	IPI0013664E	yes	yes	2	0.000416	123.51
VTIDFN(deITNPENGPVIDDAIPNSVHGHIPFAK	3440.7365	IPI00466371	IPI00466371	yes	yes	3	1.0381E-10	93.166
VTIDFN(deITDPENGPVIDDAIPNSVHGHIPFAK	3441.7205	IPI01026704	IPI01026704	yes	yes	3,4,5	3.1894E-54	167.72
VTAEVTTHTGTN(deTSTPTTR	1872.9177	IPI0047109C	IPI0047109C	yes	yes	2	0.0005141	93.495
VSTVTIVSATSTTAN(deMTMSPEGR	2340.1301	IPI0040660E	IPI0040660E	yes	yes	3	0.0001531	80.752
VSTIYANN(deGSVIQGSTVASVYHKR	2550.319	IPI00121114	IPI00121114	yes	yes	3,4	1.4458E-05	87.156
VSTIYANN(deGSVIQGSTVASVYHK	2394.2179	IPI00121114	IPI00121114	yes	yes	2,3,4	7.5507E-23E	295.69
VSQVIHEGGHN(deVTKIYESANIPDFRK	3050.5938	IPI00463764	IPI00463764	yes	no	4	0.0433	53.747
VSQVIHEGGHN(deVTK	1503.7794	IPI00463764	IPI00463764	yes	no	2,3,4	5.2942E-70	220.59
VSNYIGQAN(deQSAWITVIPK	2088.1004	IPI0082868E	IPI0082868E	yes	no	3	8.2066E-09	129.88
VSN(deVSCEASVSK	1265.5922	IPI0013556C	IPI0013556C	yes	no	2	0.01518	69.602
VSITN(deVSISDEGR	1375.6943	IPI0085672E	IPI0085672E	yes	no	2	0.002182	133.47
VSIQEIIPGSEHIEMIAN(deATTIAYIKR	2883.5164	IPI0012442E	IPI0012442E	yes	yes	3,4	0.0009465	70.917
VSIQEIIPGSEHIEMIAN(deATTIAYIK	2727.4153	IPI0012442E	IPI0012442E	yes	yes	2,3,4	2.2808E-33	165.1
VSGQMHHMQN(deITFQTEASVAQKEKFK	2995.4168	IPI00312711	IPI00312711	yes	no	3	5.6808E-06	86.557



VSGQMhMQN(deITFQTEASVAQKEK	2591.2108	IPI00312711	IPI00312711	yes	no		3	3.1995E-49	198.35
VSFYFFVTSPQN(deVSDVIPR	2201.1157	IPI00153202	IPI00153202	yes	no	2,3		0.0019104	81.157
VSEDGYSIYMSN(deITK	1705.7869	IPI0012964f	IPI0012964f	yes	no		2	0.000818	103.39
VRIDPPCTN(deTTAPSNIINPYVR	2661.2969	IPI0065853f	IPI0065853f	yes	no		3	8.0371E-15	132.74
VREAN(deITEDQIIFPK	1919.0153	IPI00122122	IPI00122122	yes	no	2,3		1.3776E-26	190.11
VQVWPGPSGYSSITAIEN(deSTDGK	2392.1547	IPI0031557f	IPI0031557f	yes	yes	2,3		4.602E-19	148.29
VQSIQTIAAN(deNSAIK	1627.8893	IPI00129304	IPI00129304	yes	yes	2,3		3.3667E-34	190.46
VQPMTASN(deWTIVMEGEWMIK	2350.116	IPI0045382f	IPI0045382f	yes	no		3	4.8516E-09	127.97
VQPIVAVADEGWYIQN(deK	2042.0837	IPI0011116f	IPI0011116f	yes	no		3	2.7171E-38	199.15
VQPIASSTIIHSDITSVYGTVMN(deR	2687.3953	IPI0067425f	IPI0067425f	yes	yes	3,4		3.3904E-14	116.43
VQPFN(deVTK	931.51272	IPI00222967	IPI00222967	yes	no		2	0.042736	73.665
VQGGSSVWGSVITHN(deSSAITYQSWGR	2763.3365	IPI00453977	IPI00453977	yes	no	3,4		9.1881E-17	126.86
VQGAWPIIDNDFIVQATSSPVSSGAN(deATTIR	3361.6943	IPI00380441	IPI00380441	yes	yes		4	2.6515E-30	125.54
VPNNAIEGIEN(deITAIYIHNEIQEVGSSMR	3347.6568	IPI00120187	IPI00120187	yes	yes		4	2.9474E-05	71.002
VPMMVQSGN(deISYFR	1627.7851	IPI0011610f	IPI0011610f	yes	yes	2,3		0.0008948	111.79
VPGN(deITSVIISNIVPR	1677.9778	IPI00221547	IPI00221547	yes	no		2	0.0013253	95.347
VPFIFNINPATTN(deFTGSCQPQSAQIR	2907.4338	IPI00222967	IPI00222967	yes	no	3,4		5.1566E-08	94.389
VNYEGGTWDWIAEAISSN(deHTR	2405.1036	IPI0013458f	IPI0013458f	yes	yes	2,3		4.7672E-21	153.65
VNRFN(deSTEYQVVTR	1711.8642	IPI0011906f	IPI0011906f	yes	no	2,3		5.7574E-23	182.02
VNNREIVSDPIYVEVQGIPYFIKQP(deESVNVTR	3701.9417	IPI00121254	IPI00121254	yes	yes		4	0.0332	57.902
VNGTDIAPDIIN(deGSQIIR	2008.0953	IPI0013169f	IPI0013169f	yes	no		2	1.9519E-25	137.73
VNGEEDFSWFGYSIHGVTVAN(deR	2483.1506	IPI0022571f	IPI0022571f	yes	yes		3	0.0007462	79.467
VNDNK(deTAAEEAIR	1429.7161	IPI0040001f	IPI0040001f	yes	no		2	1.0409E-22	183.96
VNCEERNVTGIEN(deFTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3		0.011244	73.833
VNCEERN(deVTGIENFTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3		0.011244	73.833
VNASTTDPN(deSTVEQSAITR	1989.9603	IPI0033878f	IPI0033878f	yes	no	2,3		0.0036002	85.61
VN(deYTRAEEIFSR	1483.7419	IPI0013116f	IPI0013116f	yes	yes		2	0.015255	79.466
VN(deKTEEDYAR	1223.5782	IPI0013310f	IPI0013310f	yes	no		2	6.5518E-09	154.15
VN(deITVIPSITSR	1298.7558	IPI00323857	IPI00323857	yes	no		2	0.0012571	130.56
VN(deISFPSAQSIASDTHIK	2011.0375	IPI0062466f	IPI0062466f	yes	yes	2,3		1.693E-79	220.82
VN(deGTKEPIEFK	1260.6714	IPI00345112	IPI00345112	yes	no		2	0.014709	86.114
VN(deGTITQVIIVGAPTHDDVSK	2163.1535	IPI0022571f	IPI0022571f	yes	yes	2,3		3.4539E-59	207.43
VN(deGTDIAPDIINGSQIIR	2008.0953	IPI0013169f	IPI0013169f	yes	no		2	1.9519E-25	137.73
VMVITDGDIFGDPIN(deITTVINSPK	2657.3986	IPI00119181	IPI00119181	yes	no		3	0.0024846	62.589
VMSWWDYGYQITAMAN(deR	2090.9343	IPI0010910f	IPI0010910f	yes	yes	2,3		6.2231E-89	212.39
VMSWWDYGYQIAGMAN(deR	2046.908	IPI0031646f	IPI0031646f	yes	yes	2,3		5.2644E-75	220.21
VKPTPPYN(deISVTNSEEISSIK	2415.2897	IPI0012015f	IPI0012015f	yes	yes		3	1.3884E-30	171.47
VIIYIPAYN(deCTIRPVSKR	2049.1194	IPI00469387	IPI00469387	yes	no		4	0.0076302	93.348
VIIYIPAYN(deCTIRPVSK	1893.0182	IPI00469387	IPI00469387	yes	no	2,3		0.0051433	89.624
VIWTINPNHISN(deGTIAAPVVVIPDIDEDGVR	3323.7514	IPI0046699f	IPI0046699f	yes	no	3,4,5		4.6595E-06	78.978
VIVPPAPPSCSIQGVYVGTN(deVTINCK	2866.4721	IPI00126827	IPI00126827	yes	no	3,4		2.6001E-06	83.871
VIVAPPSEEAN(deTTK	1454.7617	IPI0087541f	IPI0087541f	yes	no		2	0.0021524	102.9
VITNQESPYQN(deHTGR	1742.8336	IPI0012531C	IPI0012531C	yes	no	2,3		9.181E-12	164.15
VITMANQVITVN(deISEEGR	1973.0252	IPI0098726f	IPI0098726f	yes	yes		3	1.4184E-25	159.69
VITIAN(deFTTK	1106.6336	IPI00109727	IPI00109727	yes	yes		2	0.0007097	119.27
VISNN(deCTS YGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes	2,3		4.094E-12	161.99
VISN(deNCTS YGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes	2,3		4.094E-12	161.99
VISIAQAHSIN(deFSCEQVR	2058.0317	IPI0030899C	IPI0030899C	yes	yes		3	1.2259E-05	119.56
VIQIAMGDSAAQN(deK	1572.793	IPI00321717	IPI00321717	yes	no		3	0.0014251	94.717
VIPFN(deVTDYQCQIVR	1722.8763	IPI00828222	IPI00828222	yes	no	2,3		7.8371E-56	210.64
VINN(deITNDIR	1170.6357	IPI0012817f	IPI0012817f	yes	no		2	0.0012718	113.69
VINDTWAWKN(deATIAEQAK	2058.0534	IPI00123342	IPI00123342	yes	yes	2,3		9.1884E-19f	283.49
VINADQGSATVQMIIN(deDTCPIFVR	2762.3731	IPI0032006f	IPI0032006f	yes	yes	3,4		6.2482E-16	121.25
VIN(deITDNTYFK	1326.682	IPI00130117	IPI00130117	yes	yes		2	0.0013003	106.01
VIN(deDTWAWKNATIAEQAK	2058.0534	IPI00123342	IPI00123342	yes	yes	2,3		9.1884E-19f	283.49
VIN(deDTWAWK	1131.5713	IPI00123342	IPI00123342	yes	yes		2	0.031398	73.985
VIKDAVNN(deITAK	1284.7402	IPI0062679f	IPI0062679f	yes	no		2	0.0057513	105.65
VIIRPYITPNNQGIYIFQGN(deSTVR	2762.4868	IPI0031950f	IPI0031950f	yes	yes	2,3,4		7.3498E-257	222.91
VIIIN(deITTVAAANHG YTK	1713.9414	IPI0046760C	IPI0046760C	yes	no	2,3		1.9363E-58	218.28
VIIIDPAISGN(deETEPYPAFTR	2415.2686	IPI0084869f	IPI0084869f	yes	yes	2,3		1.7564E-31	177.08
VIIIAQTHAN(deNTGSYHCYYK	2352.1321	IPI0027313f	IPI0027313f	yes	yes		3	0.0070479	66.022
VIHIQFNSISSITDDTFCKAN(deDTR	2781.3392	IPI0012084f	IPI0012084f	yes	yes	3,4		8.5825E-16	128.38
VIFYKDDAMVYN(deVTSR	1919.9451	IPI00406901	IPI00406901	yes	no	2,3		0.012009	74.769
VIFKN(deYSINDATITIHNI GFSDSGK	2753.4024	IPI00471187	IPI00471187	yes	no		3	2.3845E-19	133.74
VIETIPANYSIN(deSSK	1634.8516	IPI00480532	IPI00480532	yes	no	2,3		1.8781E-09	160.48
VIETIPAN(deYSINSSK	1634.8516	IPI00480532	IPI00480532	yes	no	2,3		1.8781E-09	160.48
VIEQSYN(deATWIGR	1535.7732	IPI00762242	IPI00762242	yes	yes		2	0.0035622	81.904
VIENEKFDTHEYHN(deESR	2145.9716	IPI00463492	IPI00463492	yes	yes	2,3		9.273E-08	142.39
VIEEFYN(deQTNWHR	1734.8114	IPI00308691	IPI00308691	yes	no	2,3		0.0025965	124.45
VIDIW DIAQSAN(deFTEKEIESFREEIK	3109.5608	IPI00469307	IPI00469307	yes	no		4	0.019489	60.735
VIDIW DIAQSAN(deFTEK	1848.9258	IPI00469307	IPI00469307	yes	no	2,3		6.8534E-06	141.85
VIAQHQNIIIFAN(deSSSSMR	2002.0054	IPI0031904C	IPI0031904C	yes	no		3	3.3977E-05	115.38
VHSGN(deFSTIPQYFK	1623.8045	IPI01023131	IPI01023131	yes	no	2,3		0.012559	69.345
VGYSQSN(deISCFRR	1604.7406	IPI0046425f	IPI0046425f	yes	yes		2	2.9766E-05	150.12
VGVNKN(deQTVTATFGYPFR	1998.0323	IPI0011425f	IPI0011425f	yes	no	2,3,4		2.7249E-93	216.72
VGQIQISHN(deISFVIVVPVFPK	2320.3307	IPI00122977	IPI00122977	yes	yes		3	0.0046102	68.243
VGKNEAVIAWDQIPVDDQNGFIRN(deYSISYR	3466.727	IPI0012015f	IPI0012015f	yes	yes		4	0.0003539	68.689
VGIVTYSN(deETR	1237.6303	IPI0085510f	IPI0085510f	yes	no		2	0.0003375	129.84
VGATAAVYSAAII EYITAEVIEIAGN(deASK	2894.5277	IPI0055505f	IPI0055505f	yes	no	2,3		3.1265E-48	171.08
VFVYTPPTN(deYTIR	1573.814	IPI0012442f	IPI0012442f	yes	yes	2,3		3.4051E-07	111.94
VFPYISVMVNN(deGSISYDHSKDGR	2584.238	IPI00321634	IPI00321634	yes	yes	3,4,5		2.0787E-09	116.06
VFPYISVMVNN(deGSISYDHSK	2256.0885	IPI00321634	IPI00321634	yes	yes	2,3,4		3.5593E-96	232.15
VFPYISAMVNN(deGSISYDHER	2298.0739	IPI0083035f	IPI0083035f	yes	no	2,3,4		8.389E-11	136.2
VFNGKDN(deISK	1120.5877	IPI00331214	IPI00331214	yes	yes		2	0.012231	98.898
VFKTN(deSTQVSDVR	1479.7682	IPI0046942f	IPI0046942f	yes	no	2,3		8.3039E-05	150.11
VFKPQSGADAIN(deDSQDFPFETPAK	2705.2973	IPI0046246f	IPI0046246f	yes	no	3,4		1.856E-55	192.27

VFIVPVGN(deHSNIPFSR	1781.9577	IPI0022141E	IPI0022141E	yes	no	2,3	4.1748E-12	161.82
VFIQGYQIHASICN(deGSK	2034.0357	IPI00112614	IPI00112614	yes	yes		3 0.00043	95.662
VFGSQN(deITTVKIK	1433.8242	IPI00123342	IPI00123342	yes	yes		3 0.0098362	81.92
VFGSQN(deITTVK	1192.6452	IPI00123342	IPI00123342	yes	yes		2 0.0022776	98.407
VFDIHNMGSVN(deVSVGCTPAQIIETSR	2958.4328	IPI00116913	IPI00116913	yes	no		3 1.6689E-24	132.36
VETGVKPGMVVTFAPVN(deVTTEVK	2514.3767	IPI00307837	IPI00307837	yes	yes	3,4	7.5682E-29	158.52
VETGEN(deCTSPAPK	1388.6242	IPI00469221	IPI00469221	yes	no		2 0.0055572	78.814
VEFDDKGNVITSYGNPIIIN(deSSIPEDATIK	3248.6453	IPI00122257	IPI00122257	yes	no		3 2.5447E-46	151.19
VDVIVAN(deITVTDKDPHTPAWNAAYR	2893.4723	IPI00323134	IPI00323134	yes	no		3 1.1748E-07	95.624
VDNA(deSIVADDMRNAYISIEGK	2280.1056	IPI00356462	IPI00356462	yes	no		2 0.018058	65.022
VDIPQQPMGIIAVAN(deDTNSCEISPCR	2884.3517	IPI00119063	IPI00119063	yes	yes		3 0.0011941	66.3
VDIEDFEN(deNTAYAK	1627.7366	IPI0055116E	IPI0055116E	yes	no		2 2.6064E-28	134.88
VDFIWHPEVN(deGSMK	1657.7923	IPI0038029E	IPI0038029E	yes	yes		3 0.011626	69.716
VDDEMPQHAVISGNIFINNINKTDN(deGTYR	3371.6205	IPI00856723	IPI00856723	yes	no	3,4	1.0161E-10	95.666
VDDEMPQHAVISGNIFINNIN(deKTDNGTYR	3371.6205	IPI00856723	IPI00856723	yes	no	3,4	1.0161E-10	95.666
VDDEMPQHAVISGNIFINNIN(deK	2564.2693	IPI00856723	IPI00856723	yes	no		3 1.2097E-22	159.75
VDCTANTN(deTCNK	1396.5711	IPI0023010E	IPI0023010E	yes	no		2 0.009647	73.877
VAQPGINYAIGTN(deTSYPNNIIR	2375.2234	IPI0022636C	IPI0022636C	yes	no	2,3	3.3918E-31	174.04
VAN(deITVVVNSIDGK	1427.7984	IPI00310797	IPI00310797	yes	yes		3 0.0012499	131.32
VAEVENGTKPDSVPEHCIDTWSFDAATMDHN(deGTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes		4 1.3431E-08	63.848
VAEVEN(deGTKPDSVPEHCIDTWSFDAATMDHNGTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes		4 1.3431E-08	63.848
VAAN(deFSTPVIISTDSSNPGQER	2263.0717	IPI00227797	IPI00227797	yes	no		3 3.7485E-09	112.44
TYEN(deGSSVEYR	1303.5681	IPI00122117	IPI00122117	yes	yes		2 0.0050957	86.911
TYEDESPEWFQEDDAVQPN(deSSYTYVWHATKR	3777.6496	IPI00406603	IPI00406603	yes	yes		4 2.6071E-16	105.03
TYEDESPEWFQEDDAVQPN(deSSYTYVWHATK	3621.5485	IPI00406603	IPI00406603	yes	yes		3 2.265E-59	170.65
TYCANEPISNCSQVN(deR	1911.8203	IPI0012777C	IPI0012777C	yes	yes		2 2.4908E-12	165.58
TYCANEPISN(deCSQVNR	1911.8203	IPI0012777C	IPI0012777C	yes	yes		2 2.4908E-12	165.58
TYAVYDIFDTAMINN(deSR	1992.9251	IPI0022679C	IPI0022679C	yes	no	2,3	2.2577E-28	188.41
TYADDVNSEIVNIYTFN(deHTVTR	2571.2241	IPI00330714	IPI00330714	yes	no	2,3	1.2774E-39	189.34
TWAN(deYSECIK	1270.5652	IPI00114634	IPI00114634	yes	yes		2 0.002365	105.46
TVYIHAN(deQTGYDPDSSR	1904.9017	IPI0011903E	IPI0011903E	yes	yes		2 0.0052529	70.942
TVVVDN(deETVATR	1302.6779	IPI00115231	IPI00115231	yes	no		2 0.0023943	99.941
TVVTEAGNIIKDN(deATQEEIIHYIEK	2827.4604	IPI0032119C	IPI0032119C	yes	no	2,3,4	8.1428E-142	248.46
TVVQYSPN(deIIFSGIEIQKDCESNQNITCR	3628.7138	IPI00466371	IPI01026704	no	no	3,4	3.9405E-11	98.491
TVVAPSTEGGIN(deITSTFIR	1962.0422	IPI00114252	IPI00114252	yes	no	2,3	1.8242E-12	141.83
TVSTIVIQAAN(deVSAIYK	1776.9986	IPI0012432E	IPI0012432E	yes	no	2,3	1.1251E-27	181.51
TVNSIN(deVSAISIPHEHDEADDISDENREK	3096.4483	IPI0012137E	IPI0012137E	yes	no		3 2.3785E-38	159.98
TVNSIN(deVSAISIPHEHDEADDISDENR	2839.3108	IPI0012137E	IPI0012137E	yes	no		3 3.4917E-20	132.26
TVN(deMTTIIIGR	1217.6802	IPI00356462	IPI00356462	yes	no		2 0.0056273	84.479
TVN(deITRDNIIDDVISFIR	2103.1324	IPI0023071E	IPI0023071E	yes	no		3 5.3642E-25	138.39
TVIQFVAN(deISK	1218.6972	IPI00626137	IPI00626137	yes	no		2 0.0007247	112.43
TVIDKNGDAYGYYN(deDSIK	2034.9535	IPI00471081	IPI00471081	yes	yes	2,3	2.9343E-37	196.64
TVFAEHISN(deECKR	1589.762	IPI0045810E	IPI0045810E	yes	yes		3 0.010836	78.903
TVDKSTGKPTIYN(deVSIIMSDTGTCY	2807.3357	IPI0046805E	IPI0046805E	yes	yes		3 8.0758E-29	155.86
TVAN(deISGCEATDSEAIHCIR	2316.0838	IPI00154043	IPI00154043	yes	yes	2,3,4	9.6617E-14C	251.35
TTVKNITVIEPVTQPFQVTN(deTTVK	2770.548	IPI0010853E	IPI0010853E	yes	no	2,3,4	1.9549E-55	192.27
TTVKN(deITVIEPVTQPFQVTNTTVK	2770.548	IPI0010853E	IPI0010853E	yes	no	2,3,4	1.9549E-55	192.27
TTIVDNNTWN(deNSHIAIVGK	2096.0651	IPI0031646E	IPI0031646E	yes	yes	2,3	0	361.2
TTIVDN(deNTWNNSHIAIVGK	2096.0651	IPI0031646E	IPI0031646E	yes	yes	2,3	0	361.2
TSYCN(deESFYFICKK	1845.8066	IPI0012618E	IPI0012618E	yes	yes		3 7.4982E-16	171.32
TSYCN(deESFYFICK	1717.7116	IPI0012618E	IPI0012618E	yes	yes	2,3	4.5876E-21	171.73
TSSEFCQPVSIHGSN(deHTSK	2101.9487	IPI00894972	IPI00894972	yes	no	2,3	1.3488E-06	119.08
TSRPTDNSIN(deVTCGPPYETNGPK	2504.1602	IPI00323053	IPI00323053	yes	no		3 9.7455E-26	167.63
TSN(deITDTQIAEAYIYR	1857.9109	IPI0031920C	IPI0031920C	yes	no		2 2.9966E-18	177.56
TSIIVIN(deNTESNIEDFIQSIK	2377.2377	IPI0017014E	IPI0017014E	yes	yes	2,3	0	276.68
TSIDIWMHTDPMSQKN(deESVK	2346.0984	IPI00118674	IPI00118674	yes	yes		3 2.6627E-05	101.05
TSICSDAN(deCTIGSSDTHSSGIGTGR	2655.1137	IPI0047108E	IPI0047108E	yes	no		3 0.0002731	73.981
TSDTGEEEEAITN(deSTEANGKYVVVSTPEK	2955.3833	IPI0040849E	IPI0040849E	yes	no	3,4	3.9988E-17E	265.13
TSDTGEEEEAITN(deSTEANGK	1952.8447	IPI0040849E	IPI0040849E	yes	no	2,3	1.0474E-287	312.86
TR(deCNTTQGNVTSIIR	1848.9112	IPI00134743	IPI00134743	yes	no		2 0.0073518	81.594
TQVFGPVDPTVN(deTTYAFFNTFFK	2640.29	IPI0011553C	IPI0011553C	yes	yes		3 4.9518E-38	143.91
TQN(deGSIPAVTR	1142.6044	IPI0012124C	IPI0012124C	yes	yes		2 0.003308	93.623
TQMVFFNITPNIIN(deDTMEIR	2396.1868	IPI0012785E	IPI0012785E	yes	yes	2,3	7.6642E-33	183.22
TQMVFFN(deITPNIINDTMEIR	2396.1868	IPI0012785E	IPI0012785E	yes	yes	2,3	7.6642E-33	183.22
TQITCSIN(deSSGVDIVGHR	1942.9531	IPI0040849E	IPI0040849E	yes	no	2,3	1.3352E-91	234.38
TQDSIIQAETQANSCN(deITVVTIQESIEKK	3247.6242	IPI00321222	IPI00321222	yes	yes	3,4	7.8761E-32	145.54
TPVIN(deCSVAVCK	1346.6686	IPI00120674	IPI00120674	yes	no		2 0.0087538	75.088
TPTIPPVSFHIGGVWFN(deITGQDYVIK	2885.5116	IPI00113797	IPI00113797	yes	yes		3 0.0014044	65.207
TPMTN(deSSIR	1005.4913	IPI0022142E	IPI0022142E	yes	yes		2 0.0023838	119.53
TPASDPHGDN(deITYSVFYTK	2111.98	IPI0012915E	IPI0012915E	yes	no	2,3	4.6929E-08	124.18
TNSTQ(deVSDVR	1105.5364	IPI0046942E	IPI0046942E	yes	no		2 0.022512	72.2
TNIEGQVPFIPAN(deFTAHPYKEFYHYR	3352.6669	IPI00129903	IPI00129903	yes	yes		4 0.01089	55.469
TNIEGQVPFIPAN(deFTAHPYK	2457.2692	IPI00129903	IPI00129903	yes	yes	3,4	8.1967E-39	184.6
TN(deSSFIQGFVDHVKEDCDRIGPGVSDICK	3279.5289	IPI0032119C	IPI0032119C	yes	no		4 0.015193	55.986
TN(deSSFIQGFVDHVKEDCDR	2253.012	IPI0032119C	IPI0032119C	yes	no	2,3,4	3.3717E-79	223.29
TN(deSSFIQGFVDHVK	1577.7838	IPI0032119C	IPI0032119C	yes	no	2,3	1.0912E-43	205.62
TN(deQSCEIVIDSTEK	1622.7458	IPI0031005E	IPI0031005E	yes	no		2 0.0013067	128.74
TN(deKSEMWDVFCYR	1734.7494	IPI0046760C	IPI0046760C	yes	no	2,3	0.0095022	100.38
TN(deITSIIQPIPSIVK	1809.0612	IPI0098598E	IPI0098598E	yes	no		3 0.000104	114.27
TMVFPVMIYIN(deESVIIDKETANQIK	2782.4285	IPI00127447	IPI00127447	yes	yes	2,3,4	6.2499E-94	224.86
TMVFPVMIYIN(deESVIIDK	1998.0206	IPI00127447	IPI00127447	yes	yes		3 1.885E-272	223.7
TMTSGDPGETAN(deATEVKK	1835.8571	IPI00114844	IPI00114844	yes	yes	2,3	0.0050806	78.95
TMTSGDPGETAN(deATEVK	1707.7621	IPI00114844	IPI00114844	yes	yes		2 8.1563E-05	115.73
TMTIIEAGN(deNTMK	1422.6847	IPI0013111E	IPI0013111E	yes	yes		2 0.0037967	78.486
TMFN(deSTEIK	1069.5114	IPI0067739E	IPI0067739E	yes	no		2 0.012344	85.958
TKTQVFGPVDPT(deVNTTYAFFNTFFK	2869.4327	IPI0011553C	IPI0011553C	yes	yes		3 1.1996E-55	195.03

TKDISHSIYMFFN(deTSDIR	2174.0466	IPI00114457	IPI00114457	yes	yes		3	0.0038218	86.378
TIYN(deWSGYPIIVHK	1689.8879	IPI00471081	IPI00471081	yes	yes	2,3		0.0001389	143.46
TIYETEVFSTDFSN(deVSAAQHK	2373.1125	IPI00410951	IPI00410951	yes	yes		3	0.0003788	86.453
TITVYN(deFSAPVITISQIEVSEGSQVTVK	3009.591	IPI00122973	IPI00122973	yes	no	2,3,4		2.1894E-26	136.34
TITIINVTRN(deDTGPPYVCETR	2322.1638	IPI00108535	IPI00108535	yes	no	2,3		1.9423E-96	238.19
TITIIN(deVTRNDTGPYVCETR	2322.1638	IPI00108535	IPI00108535	yes	no	2,3		1.9423E-96	238.19
TITIIN(deVTR	1029.6182	IPI00108535	IPI00108535	yes	no		2	5.1421E-09	148.56
TISPTGN(deISSAPK	1271.6721	IPI00263505	IPI00263505	yes	no		2	0.0032713	107.53
TISDVPSAAPQN(deISIEVR	1895.9953	IPI00129155	IPI00129155	yes	no		2	1.5191E-28	186.97
TIPHHQYN(deATINK	1535.7845	IPI00348265	IPI00348265	yes	yes	2,3		0.0002115	145.81
TIN(deWSAAEPGAWATKVEWDEHK	2525.1975	IPI0033144C	IPI0033144C	yes	no		3	1.0934E-10	121.44
TIN(deWSAAEPGAWATK	1601.7838	IPI0033144C	IPI0033144C	yes	no	2,3		1.021E-24	183.23
TIMSAEANIAGIFPPNEVQHFNPN(deISWQPIPVHTVPITEDR	4579.2958	IPI00154055	IPI00154055	yes	no	4,5		4.8568E-19	99.357
TIIVDNNTWN(deNTHISR	1896.9442	IPI00109105	IPI00109105	yes	yes	2,3		0	277
TIIVDN(deNTWNNTHISR	1896.9442	IPI00109105	IPI00109105	yes	yes	2,3		0	277
TIISYYN(deQSAGGSHTIQVISGCEVGS DGR	3055.4305	IPI00474494	IPI00474494	yes	no		3	5.619E-38	151.42
TIIPAAAQDVYYRDEIGN(deVSTSHIIIDDSVEMEIRPR	4299.1845	IPI00309035	IPI00309035	yes	yes	4,5		2.9611E-11	77.233
TIIGYYN(deQSNDESHTIQWMYGCDVGP DGR	3375.4561	IPI00322542	IPI00322542	yes	yes	3,4		4.416E-38	153.17
TIIGYYN(deQSESGSHTIQWMYGCK	2722.2156	IPI00608044	IPI00608044	yes	no	3,4		0.000143	82.586
TIIGYYN(deQSAGGHTIQWMYGCDVGS DGR	3206.4186	IPI00109995	IPI00109995	yes	yes	3,4		7.6254E-66	194.97
TIGISPFHEFADVFTAN(deDSGHR	2516.2084	IPI0012756C	IPI0012756C	yes	yes	2,3,4		5.3422E-103	234.38
TIFPNYFN(deGSEIVIAGK	1868.9672	IPI00222365	IPI00222365	yes	yes		2	5.2949E-07	136.39
TIEQERN(deASFVYTKAIMAYAFIAGNQNK	3248.6288	IPI00123223	IPI00123223	yes	yes		4	0.019157	53.747
TIEQERN(deASFVYTK	1684.842	IPI00123223	IPI00123223	yes	no	2,3		2.2197E-55	210.41
TIEDIIFRAEN(deR	1475.7732	IPI00122312	IPI00122312	yes	no		3	0.0066466	99.568
TIAGEN(deQTAIEIEEINR	1899.9538	IPI00400015	IPI00400015	yes	no	2,3		8.0274E-105	239.58
TGVNSGVMIMN(deMTR	1509.7102	IPI00856861	IPI00856861	yes	no	2,3		0.0006772	110.98
TGVHDGDFEYN(deITTTIAAINK	2279.107	IPI00108845	IPI00108845	yes	no		3	3.8166E-15	138.66
TGTIAIQN(deTTQIR	1415.7732	IPI00623114	IPI00623114	yes	no		2	0.0002907	143.94
TGHTNAHGK(deDIDTDFTSNASQPETK	2671.211	IPI00130573	IPI00130573	yes	yes		3	2.9597E-24	141.78
TGHRPPNPAFWVN(deGSGTEVK	2336.145	IPI00221555	IPI00221555	yes	no		3	0.014996	66.874
TGEIN(deITSIVDR	1316.6936	IPI0038046C	IPI0038046C	yes	no		2	0.001894	106.58
TGEIFTFN(deTTAAQPQYFKYFPDGVDSVIVK	3511.7188	IPI00330714	IPI00330714	yes	no	3,4		9.2496E-47	155.8
TGEIFTFN(deTTAAQPQYFK	2063	IPI00330714	IPI00330714	yes	no	2,3		3.6208E-28	182.49
TGEAN(deITQIYTQEAIQIQTHAR	2747.3515	IPI0031009C	IPI0031009C	yes	no	2,3,4		2.3565E-145	254.4
TGDGNSVTSN(deFTKDPSSIIPEIIPGVSYTVK	3248.6816	IPI00469425	IPI00469425	yes	no		3	2.6368E-07	87.489
TGDGNSN(deVTSNFTKDPSSIIPEIIPGVSYTVK	3248.6816	IPI00469425	IPI00469425	yes	no		3	2.6368E-07	87.489
TFDVSNFQN(deSSIKR	1641.8111	IPI0027269C	IPI0027269C	yes	no		2	0.015625	73.156
TFAVYIN(deSTGYR	1390.6881	IPI0026803C	IPI0026803C	yes	yes		2	0.0096685	73.848
TEVSNNNVIIIDQVTN(deQTIAFSFIQQDIPVR	3791.9734	IPI00123223	IPI00123223	yes	yes	3,4		3.2828E-06	73.389
TEVKPVATEQIISTFITVGN(deNTCFYGK	3016.5216	IPI00122494	IPI00122494	yes	yes		3	0.0018759	67.979
TEVIIQGTVSPN(deASAPDAVWEDYEFK	2865.3709	IPI00405437	IPI00405437	yes	no		3	0.0059569	57.145
TEQIPVN(deK	927.50255	IPI0027643C	IPI0027643C	yes	yes		2	0.013937	100.02
TEQIIQAPN(deTSVHIYEPYPAGADVPFPPINK	3575.83	IPI0013260C	IPI0013260C	yes	no	3,4		1.7174E-54	166.22
TEKDPQNDPVGTCYISTEN(deFTR	2571.1547	IPI00115975	IPI00115975	yes	yes	2,3		1.6923E-85	219.87
TEIDIRPQGIATFSN(deVSEAR	2215.1597	IPI00122973	IPI00122973	yes	no	2,3,4		1.1053E-19	169.25
TEGMIIN(deVTSSIR	1419.7392	IPI00109254	IPI00109254	yes	yes		2	0.0025755	115.06
TEFN(deITSYSSKR	1431.6994	IPI00855103	IPI00855103	yes	yes		2	0.047838	64.55
TEAGVFEYVADPTFEN(deFTGGVVK	2505.2064	IPI00405742	IPI00405742	yes	no	2,3,4		1.498E-103	238.8
TEAGVFEYVADPTFEN(deFTGGVK	2377.1114	IPI00405742	IPI00405742	yes	no	2,3		5.4875E-39	186.45
TDVN(deSSRNPDTIAAWYIR	2078.0181	IPI00406603	IPI00406603	yes	yes		3	0.0002509	109.07
TDPANQFEWIENTIN(deSSIWNKEK	2763.314	IPI00136255	IPI00136255	yes	yes	3,4		0.0003519	83.849
TDDEVVQREEEAIQIDGIN(deASQIR	2727.3311	IPI00129525	IPI00129525	yes	yes	3,4		2.2355E-66	204.47
TDAEIN(deETARPISPVNPK	1951.0011	IPI00408895	IPI00408895	yes	yes		2	0.0001511	111.77
TCVSN(deCTASQFVCKNDK	2017.8656	IPI00119063	IPI00119063	yes	yes	2,3		9.9377E-05	119.23
TCVSN(deCTASQFVCK	1660.7007	IPI00119063	IPI00119063	yes	yes	2,3		3.0186E-56	216.27
TCPIDEFQCN(deNTICKPIAWK	2494.1443	IPI00119063	IPI00119063	yes	yes		3	4.4242E-06	115.73
TCPAGIMGEN(deNTIVWK	1789.8491	IPI0012119C	IPI0012119C	yes	no	2,3		1.3625E-125	254.1
TASVSIN(deQTEPPKVR	1625.8737	IPI0012922C	IPI0012922C	yes	yes	2,3		5.1316E-17	174.59
TASVSIN(deQTEPPK	1370.7042	IPI0012922C	IPI0012922C	yes	yes		2	0.0025413	119.96
TAQSYYN(deQSK	1188.5411	IPI0031298C	IPI0031298C	yes	no		2	3.818E-45	202.65
TANDAIQDMICDMEGIPQKHN(deFSHCCGK	3276.3879	IPI00130654	IPI00130654	yes	no		4	0.0056402	57.238
TAN(deETSAEAYNIIR	1664.837	IPI00400015	IPI00400015	yes	no	2,3		9.5447E-147	266.45
TAMAATVAPHTATIAAGTVN(deTSDPHTR	2662.3133	IPI0047109C	IPI0047109C	yes	yes		3	3.007E-22	124.4
TAIWWATDHNTDN(deTSAIIR	2098.0443	IPI0016987C	IPI0016987C	yes	yes	2,3		1.6911E-41	192.6
TAIVQEVHQN(deFSAWCSQVIR	2372.1695	IPI00381303	IPI00381303	yes	yes	2,3		1.3058E-10	133.78
TAIFPDIIVQGN(deASIR	1713.9414	IPI00124075	IPI00124075	yes	yes		3	0.0002429	112.15
TAGWNIPMGIAN(deQTR	1741.8934	IPI00323235	IPI00323235	yes	yes	2,3		7.8962E-35	197.75
TAGAN(deGTSGFFCVDEGGIPIAQR	2324.0855	IPI00282285	IPI00282285	yes	no	3,4		4.9156E-26	166.29
TAFITN(deFTITIDGVTYPGNVK	2271.1787	IPI00124725	IPI00124725	yes	no		2	1.5149E-14	132.01
TAFAPPDIPVCIIGN(deR	1739.9029	IPI00331175	IPI00331175	yes	no		3	5.7847E-06	143.25
TAASIIWQAYPIIN(deISEK	2017.0884	IPI00115867	IPI00115867	yes	yes	2,3		2.2835E-16	170.16
TAADATGIQPIINQFTPAN(deVSR	2284.1812	IPI00120245	IPI00120245	yes	no	2,3		5.2667E-86	221.25
SYSSIQQDIFQFQKN(deQTSIEKK	2646.3289	IPI00128905	IPI00128905	yes	yes		3	1.6569E-08	115.34
SYSSIQQDIFQFQKN(deQTSIEK	2518.234	IPI00128905	IPI00128905	yes	yes		3	3.5562E-14	137.61
SYSFIN(deSSIIGR	1342.6881	IPI00110385	IPI00110385	yes	yes		2	0.001235	129.37
SYN(deDSVDPR	1051.4571	IPI0011348C	IPI0011348C	yes	no		2	0.0065494	106.2
SYIFIYDGNKNSTTTDQN(deFTSAK	2614.2187	IPI0012483C	IPI0012483C	yes	no	2,3		1.0647E-38	183.07
SYIFIYDGNKN(deSTTTDQNFTSAK	2614.2187	IPI0012483C	IPI0012483C	yes	no	2,3		1.0647E-38	183.07
SYIDDRPIQHUYAVSSPTNTTYVQYAIAN(deITGK	3797.9265	IPI00118674	IPI00118674	yes	yes		3	1.2937E-34	125.59
SYIDDRPIQHUYAVSSPTN(deTTYVQYAIANITGK	3797.9265	IPI00118674	IPI00118674	yes	yes		3	1.2937E-34	125.59
SYCKNGVN(deGTGENGRK	1739.8009	IPI00132474	IPI00132474	yes	yes	2,3		1.3333E-145	265.12
SYCKNGVN(deGTGENGR	1611.706	IPI00132474	IPI00132474	yes	yes	2,3		0.0051622	116.63
SWVQGN(deITACGR	1347.6354	IPI00153385	IPI00153385	yes	no		2	0.0048995	80.312
SWSTVGN(deCTAAIRWIERYCFQGNK	3066.4229	IPI00128484	IPI00128484	yes	yes		3	2.3222E-05	88.396
SWSTVGN(deCTAAIR	1421.6721	IPI00128484	IPI00128484	yes	yes		2	6.8038E-16	173.44

SVYN(deCSGEACSGHNR	1696.6682	IPI0031472E	IPI0031472E	yes	yes	2,3	9.1431E-25	183.96
SVVHHIN(deGSTIR	1318.7106	IPI0075806E	IPI0075806E	yes	no	2,3	0.0014947	111.12
SVN(deQSIIEIHK	1266.6932	IPI0023014E	IPI0023014E	yes	yes	2,3	0.0011409	113.24
SVKQEMNGTYVCHAFSSHGN(deVTR	2608.1911	IPI0012297E	IPI0012297E	yes	no	3	0.0071596	71.735
SVKQEMN(deGTYVCHAFSSHGNVTR	2608.1911	IPI0012297E	IPI0012297E	yes	no	3	0.0071596	71.735
SVIEN(deTTSYEEAKNTITK	2027.0059	IPI0012526E	IPI0012526E	yes	yes	2,3	0	366.58
SVIEN(deTTSYEEAK	1469.6886	IPI0012526E	IPI0012526E	yes	yes	2	0.0021804	133.48
SVGTGTNMVFNQNCSCIGSSGN(deSSAVIGICK	3091.3831	IPI0062583E	IPI0062583E	yes	no	3	7.524E-31	130.78
SVGTGTNMVFNQ(deCSCIGSSGNSSAVIGICK	3091.3831	IPI0062583E	IPI0062583E	yes	no	3	7.524E-31	130.78
SVAQN(deYSSITHIHSIGK	1840.9432	IPI00896674	IPI00896674	yes	yes	2,3	1.0677E-06	131.45
STTQTN(deSSDSHIVK	1503.7165	IPI00111807	IPI00111807	yes	no	2	0.0023451	90.444
STN(deASFNIK	980.49271	IPI0022258E	IPI0022258E	yes	no	2	0.0030728	117.52
STGKPTIYNVSI(deMSDTGGTCY	2364.0977	IPI0046805E	IPI0046805E	yes	yes	2,3	1.6384E-13E	250.86
STFQN(deVTVIIAVITQK	1761.0036	IPI0012177E	IPI0012177E	yes	yes	2,3	2.3556E-18E	238.07
STEVSN(deHTIK	1114.5619	IPI0027269C	IPI0027269C	yes	no	2	0.0021113	107.03
SSVEIIN(deSTQAPMR	1531.7664	IPI0012016E	IPI0012016E	yes	yes	2,3	0.0009804	133.48
SSTEN(deTSAEIHVIGR	1599.7853	IPI00330594	IPI00330594	yes	yes	2,3	7.2133E-08	155.22
SSSYHENDMENPQSN(deITMVYIPIGPK	3063.4318	IPI0040660E	IPI0040660E	yes	yes	3	4.2247E-26	132.36
SSSHIPPSSYFN(deASGR	1692.7856	IPI00130661	IPI00130661	yes	yes	2,3	5.361E-90	238.02
SSQSN(deQTIWFGHFTTSTIMSPSPGIR	2866.3708	IPI00226714	IPI00226714	yes	no	3	5.583E-26	149.32
SSQSIIN(deSSNQK	1291.6368	IPI00621024	IPI00621024	yes	yes	2	0.0025229	95.981
SSGN(deSSAVIGICK	1278.6238	IPI0011495C	IPI0011495C	yes	yes	2	0.0029934	91.62
SSAN(deQSEFQQQIQK	1621.7696	IPI0099093E	IPI0099093E	yes	no	2,3	1.621E-86	235.22
SRYPHKPE(deINSTTHPGADIK	2247.1396	IPI0011420E	IPI0011420E	yes	yes	2,3	5.6225E-10	136.26
SRNTTVADTYN(deITDPEEFETEYPPFFESR	3357.495	IPI0012022E	IPI0012022E	yes	no	3	6.3445E-06	81.974
SRN(deTTVADTYNITDPEEFETEYPPFFESR	3357.495	IPI0012022E	IPI0012022E	yes	no	3	6.3445E-06	81.974
SRGYN(deSSQDIPSIVDFVK	2124.0851	IPI0012466E	IPI0012466E	yes	yes	2,3	0.0023292	87.49
SQSPSIMYTINGFVN(deK	1784.8767	IPI0040660E	IPI0040660E	yes	yes	2,3	1.9572E-17	134.81
SQNDKFN(deVSITVK	1478.7729	IPI00466371	IPI01026704	no	no	2,3	8.6335E-33	199.31
SQN(deDTVTPDVWYTSKPEKK	2222.0855	IPI0047123E	IPI0047123E	yes	yes	3	8.2478E-06	119.23
SQIVN(deETHWQYYGTSDDR	2183.9872	IPI0074965E	IPI0074965E	yes	no	2,3	8.2137E-21	174.02
SQITISNIDVNVDPGTYVCN(deATNAQGTR	3108.4782	IPI0040849E	IPI0040849E	yes	no	2,3	1.7218E-56	185.7
SQHIN(deSTDAADK	1285.5899	IPI0012833E	IPI0012833E	yes	yes	2	0.0025337	95.651
SQHIDN(deFSNQIGK	1486.7165	IPI0040660E	IPI0040660E	yes	yes	2	1.6915E-05	105.46
SQFVVSSN(deSSK	1168.5724	IPI0011481C	IPI0011481C	yes	yes	2	0.0054874	85.554
SPVR(deTEFNITSYSSK	1714.8526	IPI0085510E	IPI0085510E	yes	yes	3	0.0061199	87.447
SPVIIGQPNTIICFVDNIFPPVIN(deITWIR	3335.8104	IPI0017203E	IPI0017203E	yes	no	3,4	0.0017668	57.738
SPIQEN(deSSDSNKIAWEDFIGDEADEKTYNDVIFR	3931.8024	IPI0013329E	IPI0013329E	yes	no	4	0.0014338	55.884
SPGAQDN(deVSVSQGMR	1531.7049	IPI0034858E	IPI0034858E	yes	no	2,3	0.0004022	114.7
SPFYN(deISDQISFQCYDGYVIR	2571.174	IPI0011406E	IPI0011406E	yes	no	3	3.0523E-05	113.47
SPFIASVSDQHGVYITENKN(deK	2446.2492	IPI0012432E	IPI0012432E	yes	no	3	0.013379	65.423
SPDKETFTCWVNPGSDGGIPTN(deYSITYSK	3307.4768	IPI00321091	IPI00321091	yes	no	3	0.0001497	76.161
SPANGSIGPMIN(deISSGESR	1872.9	IPI0011261E	IPI0011261E	yes	no	2	0.0001765	98.443
SPAN(deGSIGPMINISSGESR	1872.9	IPI0011261E	IPI0011261E	yes	no	2	0.0001765	98.443
SNKYSQ(deAANSTKEIDDCEQANK	2500.1136	IPI0018735E	IPI0018735E	yes	yes	4	2.3628E-08	112.82
SNKYSQ(deAANSTK	1297.6262	IPI0018735E	IPI0018735E	yes	yes	2	0.0030521	122.34
SNIDPSNVDSIFYAAQSSQVISGCEISVSN(deETK	3545.6468	IPI00475154	IPI00475154	yes	yes	3,4	3.1141E-06	73.389
SNF(deTPATNEAPQATVFPK	1918.9425	IPI0017203E	IPI0017203E	yes	no	2	6.991E-11	151.41
SNASDDPISISPGTPPPPIINN(deSTHR	2586.2674	IPI0011825C	IPI0011825C	yes	yes	3	0.014152	52.03
SNASDDPISISPGTPPPPIIN(deNSTHR	2586.2674	IPI0011825C	IPI0011825C	yes	yes	3	0.014152	52.03
SN(deYSVIDITPVAIIPK	1800.0033	IPI0022507E	IPI0022507E	yes	no	2,3	1.0696E-60	214.81
SN(deVTRPSEFNWIWAPIPIFIK	2491.3264	IPI0031950E	IPI0031950E	yes	no	2,3,4	1.8671E-14	137.14
SN(deITVIR	801.47085	IPI0022951E	IPI0022951E	yes	no	2	0.0078227	105.57
SN(deISIR	801.47085	IPI00323134	IPI00323134	yes	no	2	0.0031313	123.98
SMANQIITFN(deISSK	1552.7919	IPI0046760C	IPI0046760C	yes	yes	3	4.4739E-24	188.4
SMAGSGHN(deVSQEAIAIKR	1854.937	IPI0031467E	IPI0031467E	yes	yes	2,3,4	6.196E-06	122.01
SMAGSGHN(deVSQEAIAIK	1698.8359	IPI0031467E	IPI0031467E	yes	yes	2,3	3.3394E-11	158.98
SKN(deITIVEIPDEVIVPR	1921.0884	IPI0011883C	IPI0011883C	yes	yes	2,3	2.8088E-27	182.34
SKIDTEVAN(deISVVMEEMK	2022.0013	IPI00129304	IPI00129304	yes	yes	3	0.0002079	107.5
SITVIIGAHN(deK	1151.6663	IPI0023042E	IPI0023042E	yes	yes	2	7.2473E-11	161.62
SITQGSIIVGNIAPVN(deGTSQGK	2140.1488	IPI0051536C	IPI0051536C	yes	no	2,3	6.6654E-23E	289.35
SITHDTDGVAVFVINIPSN(deVTVIK	2538.3694	IPI0033083E	IPI0033083E	yes	yes	3	4.6809E-39	176.1
SITFN(deESYQDVSEVVYGA	2135.0059	IPI0013664E	IPI0013664E	yes	yes	2,3	0	317.58
SISN(deSTAR	834.41954	IPI0011473E	IPI0011473E	yes	yes	2	0.0048622	118.33
SISEN(deATATTEPK	1347.6518	IPI0094409E	IPI0094409E	yes	no	2	2.9266E-70	227.63
SISCQMAAFRGN(deGSER	1769.7937	IPI00129677	IPI00129677	yes	no	2,3	0.0045411	91.355
SIQT(deTSDQQNIKVPGNITSVIISNIVPR	3021.6459	IPI00221547	IPI00221547	yes	no	3	4.8959E-18	111.84
SIPVN(deDSVIDVFERR	1744.9108	IPI0012212E	IPI0012212E	yes	no	2,3	2.5135E-07	151.07
SIPVN(deDSVIDVFER	1588.8097	IPI0012212E	IPI0012212E	yes	no	2,3	7.8791E-07	154.46
SIPQSSWGN(deWSSWK	1648.7634	IPI00118291	IPI00118291	yes	no	2	0.0021776	102.64
SIPPGIFSTSAN(deISTIVIR	1972.0993	IPI0012925C	IPI0012925C	yes	yes	2,3	2.3376E-15	157.14
SIPNN(deVTSFEVESIKPYK	2051.0575	IPI0032305E	IPI0032305E	yes	no	2,3	1.8748E-60	211.06
SINGVIIPGGGAN(deITDSGYSR	2047.0334	IPI0012924E	IPI0012924E	yes	no	2	1.5001E-11	128.98
SIN(deVTGQGFSSIIQK	1490.8093	IPI0040574E	IPI0040574E	yes	no	2,3	2.4494E-86	233.02
SIN(deGTFFGGWK	1212.5928	IPI0013693E	IPI0013693E	yes	yes	2	0.0015831	101.93
SIN(deCTVK	820.41129	IPI0041718C	IPI0041718C	yes	no	2	0.007312	109.11
SIIW(deTETFMNKENQNHSYSIK	2569.2271	IPI0012024E	IPI0012024E	yes	no	3	1.0941E-05	99.891
SIIGSPTWKN(deVSR	1669.9515	IPI0022571E	IPI0022571E	yes	yes	2,3	1.9125E-07	155.43
SIIEFN(deTTMGCQPSDSQHR	2206.9736	IPI00308971	IPI00308971	yes	yes	2,3	3.2904E-25	177.44
SIIDHIHVGVRDN(deVSQPK	2070.097	IPI0012342E	IPI0012342E	yes	no	2,3,4	1.7489E-18	161.35
SIGPNTCSSN(deGSSYFIHGPNICYSSIDKINAAK	3834.7982	IPI00128484	IPI00128484	yes	yes	4	2.3996E-13	94.152
SIGNVN(deFSVSAEAQQSSEPCGSEVATVPETGRK	3421.6056	IPI0012322E	IPI0012322E	yes	yes	3,4,5	4.3881E-88	203.79
SIGEVN(deFTATAEAIQSPEICGNKITEVPAIVHK	3522.8028	IPI0062466E	IPI0062466E	yes	yes	4	1.7905E-11	95.823
SIGEVN(deFTATAEAIQSPEICGNK	2435.1639	IPI0062466E	IPI0062466E	yes	yes	2,3,4	9.2767E-121	241.44
SIFN(deFSSCKGQK	1401.6711	IPI00420867	IPI00420867	yes	no	3	0.010252	83
SIFN(deFSSCK	1088.4961	IPI00420867	IPI00420867	yes	no	2	0.022692	80.763



SIFGAIPGN(deR	1030.556	IPI00400073	IPI00400073	yes	yes		2	0.00041	123.63
SIDNDNYVFTAPYFN(deK	1906.8737	IPI00626793	IPI00626793	yes	no		2	8.6627E-13	168.69
SIDEEAIKEN(deNSIHWK	1911.9327	IPI00123223	IPI00123223	yes	no	2,3,4		3.9068E-46	209.67
SIDAYPVINQAQAMEN(deHTEVHFQK	2769.3181	IPI00468674	IPI00468674	yes	no	3,4		9.2315E-16	122.49
SICING(deKWDPEPNCTSK	2004.9033	IPI0013001C	IPI0013001C	yes	no	2,3		0.0008982	106.93
SHTNTSHVMQYGN(deK	1602.7209	IPI00130627	IPI00130627	yes	yes	2,3		8.2521E-16	173.19
SHTN(deTSHVMQYGNK	1602.7209	IPI00130627	IPI00130627	yes	yes	2,3		8.2521E-16	173.19
SHPIHSPVN(deWTSYASSVESTPTK	2511.203	IPI00129215	IPI00129215	yes	yes		3	1.901E-05	90.729
SHGIWN(deNTVFIFSTDNGGQTR	2350.1091	IPI00652358	IPI00652358	yes	no		3	0.0012912	78.78
SGTIFDNFIITNDEAYAEFFGN(deETWGVTK	3267.4884	IPI00123639	IPI00123639	yes	yes	3,4		1.5829E-56	185.84
SGSEKWN(deFSVGHFEIR	1878.9013	IPI0013100C	IPI0013100C	yes	no		3	0.0067256	83.729
SGQVEVN(deITEFPYTPPEHGR	2357.1288	IPI00311405	IPI00311405	yes	yes		3	0.0036998	69.763
SGQEDHYWIDVEKN(deQSAK	2132.9763	IPI00319509	IPI00319509	yes	no	2,3,4		4.5354E-109	243.86
SGDASIN(deVTNIQISDIGTYQCK	2383.1326	IPI00270376	IPI00270376	yes	no	2,3		1.9832E-102	232.82
SFWYHDMDDPKGHIIAQVA(deTNPQGITGTGNTTSEMDPshr	4524.0863	IPI00321375	IPI00321375	yes	no		4	0.057035	33.165
SFTVN(deWTPPAGDWEHYR	2061.9333	IPI00229935	IPI00229935	yes	no	2,3		5.4401E-07	136.26
SFQQSHVHVHDIQSFIDNIN(deMTHYIK	3194.5356	IPI00626555	IPI00626555	yes	no	3,4,5		4.1264E-65	192.12
SFPVYIN(deGSTVPSPVK	1690.893	IPI00229935	IPI00229935	yes	no	2,3		7.8259E-12	131.56
SFMVN(deWTQSPGKVEKYR	2056.02	IPI00330632	IPI00330632	yes	no		3	0.0085666	91.207
SFMVN(deWTQSPGKVEK	1736.8556	IPI00330632	IPI00330632	yes	no	2,3		2.9799E-11	162.81
SFMVN(deWTQSPGK	1380.6496	IPI00330632	IPI00330632	yes	no		2	7.9557E-07	155.66
SFIISIAAIHDN(deHTHSDIQVK	2345.2128	IPI00130624	IPI00130624	yes	yes	3,4		1.6185E-11	128.69
SFDCCGIFN(deITTR	1702.7807	IPI00132189	IPI00132189	yes	yes	2,3		2.9364E-17	179.65
SEYQK(deWECKNDTIFGIK	2145.0201	IPI00126186	IPI00126186	yes	yes	2,3		3.7393E-30	178.51
SEPQEYN(deVSIPHFVWPVNAISFR	2744.3347	IPI00117841	IPI00117841	yes	no		3	0.0003832	73.675
SEHIVN(deFTVK	1172.619	IPI00330481	IPI00330481	yes	yes		3	0.012372	81.771
SEEIEFIGN(deSSIR	1479.7205	IPI00320618	IPI00320618	yes	yes		2	6.1128E-07	158.52
SDVIN(deITEQVQWVK	1657.8675	IPI00223987	IPI00223987	yes	yes		2	1.9084E-07	159.13
SDN(deGSYFCK	1076.4233	IPI00121254	IPI00121254	yes	yes		2	0.0066525	105.86
SDINPAN(deGSYPFQAIHQ	2013.9657	IPI0016573C	IPI0016573C	yes	yes	2,3		3.0478E-48	200.77
SDIN(deCSVMEATEEK	1611.6756	IPI00130015	IPI00130015	yes	no		2	9.535E-07	152.94
SDIIVQTDATNPSVPIDPISVSN(deSSSQIIK	3400.7613	IPI00128358	IPI00128358	yes	no		4	0.0009652	52.249
SDGIPIAPCGAIANSIFN(deDSFSIWHQR	2972.4239	IPI00221859	IPI00221859	yes	yes		3	2.3536E-06	84.602
SDFSQTMIFQAN(deTTR	1745.8043	IPI00114671	IPI00114671	yes	no	2,3		1.2361E-24	181.51
SCVAITDAFPQN(deMSRR	1851.872	IPI00405742	IPI00405742	yes	no		3	0.039387	61.167
SCVAITDAFPQN(deMSR	1695.7709	IPI00405742	IPI00405742	yes	no	2,3		1.1897E-07	151.44
SCIN(deESAIDSR	1250.5561	IPI00461861	IPI00461861	yes	no		2	0.0003032	122.33
SCHTAVGTSEGWNVPMGIYN(deQTGSCK	2953.3157	IPI0047108C	IPI0047108C	yes	no	3,4		2.1805E-31	142.32
SCGECIQAGPNCGWCTN(deTTFIQEGMPTSAR	3389.3992	IPI00132474	IPI00132474	yes	yes		4	1.9896E-16	104.38
SAVSTSWIIPYN(deHTWSHEK	2242.0807	IPI00124428	IPI00124428	yes	yes	2,3		8.6578E-25	172.91
SAVFHRIEGITN(deETYR	1891.9541	IPI00119299	IPI00119299	yes	no	2,3		0.000326	126.48
SAGN(deMSTYNCQIIK	1585.7229	IPI0013352C	IPI0013352C	yes	yes		2	7.3571E-07	154.69
SAEN(deFTVIIK	1120.6128	IPI00130271	IPI00130271	yes	no		2	0.0057967	95.477
SAEGTFFIN(deKTK	1341.6929	IPI00125522	IPI00125522	yes	no	2,3		1.3984E-06	157.56
SAEGTFFIN(deK	1112.5502	IPI00125522	IPI00125522	yes	no		2	0.0024682	104.82
RYIKNG(deNATIIR	1417.8154	IPI00985828	IPI00985828	yes	no		2	0.01873	91.313
RYIK(deNGNATIIR	1417.8154	IPI00985828	IPI00985828	yes	no		2	0.01873	91.313
RYIEIG(deNETIIR	1475.8096	IPI00850057	IPI00850057	yes	no	2,3		1.4237E-103	244
RVNDN(deKTAEEAIR	1585.8172	IPI00400016	IPI00400016	yes	no	2,3		4.3807E-10	166.62
RVNASTTDP(deNSTVEQSAITR	2146.0614	IPI00338785	IPI00338785	yes	no		3	0.048901	54.964
RSPGAQD(deNVSVSQGM	1687.806	IPI00348586	IPI00348586	yes	no		3	0.0035851	89.506
RSN(deFTPATNEAPQATVFPK	2075.0436	IPI00172039	IPI00172039	yes	no	2,3		1.1131E-12	148.01
RQDPVSWN(deKTFEDISR	1976.9704	IPI00848693	IPI00848693	yes	yes		3	0.012082	89.911
RQDPVSWN(deK	1128.5676	IPI00848693	IPI00848693	yes	yes		2	0.032685	89.047
RPYIVPIIWIN(deETGTIGDEKAEMFK	2919.5205	IPI00331214	IPI00331214	yes	yes		4	0.0020976	73.783
RPYIVPIIWIN(deETGTIGDEK	2313.2369	IPI00331214	IPI00331214	yes	yes		3	8.8006E-06	109.54
RPFVVYEMEVDTIETTCHADPTPIAN(deCSVR	3676.7324	IPI00128249	IPI00128249	yes	yes	3,4		1.6309E-05	73.213
RNPSANTFIHI(deNASSFR	1930.9762	IPI00315535	IPI00315535	yes	yes	2,3		3.7885E-10	151.44
RN(deWTETEVR	1189.584	IPI0013439C	IPI0013439C	yes	yes		2	0.01547	101.97
RN(deFTAADWGHSR	1416.6647	IPI00339885	IPI00339885	yes	no	2,3		0.0038038	106.17
RMHI(deNGSNVQVIHR	1659.874	IPI00119063	IPI00119063	yes	yes	2,3,4		2.6363E-32	192.14
RMEISVGAIQAN(deR	1443.7616	IPI00108811	IPI00108811	yes	yes	2,3		0.0050259	131.17
RIQEGHEYDTFDIN(deDTAQCFK	2687.1922	IPI00400073	IPI00400073	yes	yes		3	1.0112E-17	141.07
RIPVTN(deISQIHK	1404.8201	IPI00469426	IPI00469426	yes	no		3	0.0091088	80.69
RIGAIN(deNSIIIEDR	1695.9632	IPI00115516	IPI00115516	yes	no		3	0.0032465	93.478
RIAVDWESIGYN(deITR	1791.9268	IPI0012304C	IPI0012304C	yes	no		3	2.2703E-07	151.99
RHEEGHMIN(deCTCFGQGR	2087.8836	IPI00113539	IPI00113539	yes	no	2,3		1.114E-05	125.5
RGVFITN(deETGQPIIGK	1728.9523	IPI0011196C	IPI0011196C	yes	no	2,3		8.4858E-35	198.85
RGFTDCAIAN(deMTQQIR	1981.9462	IPI00621027	IPI00621027	yes	no	2,3		2.1624E-12	128.74
RGPECSQN(deYTAPTGVK	1876.9101	IPI00123996	IPI00123996	yes	yes	2,3		2.6825E-14	163.56
RGDDIYTN(deVTVSIVEAIVGFEMDITHIDGHK	3443.7031	IPI00320241	IPI00320241	yes	yes		4	0.057351	38.925
RGCKDN(deATDSVPIR	1587.7787	IPI00119063	IPI00119063	yes	yes	2,3		0.015211	90.793
RFHSDIN(deISESIIPAVIEK	2167.1637	IPI00831484	IPI00831484	yes	yes		3	0.0010418	89.358
RFANEYP(deNITR	1379.6946	IPI00130573	IPI00130573	yes	yes		2	0.062362	63.727
RDQGN(deVTDMASMK	1451.6497	IPI00471081	IPI00471081	yes	yes	2,3		9.6825E-16	172.76
RDDYRPTWTI(deNQTEPVAGNYYPVNTR	3125.4955	IPI00381303	IPI00381303	yes	yes		3	1.2313E-05	88.627
RDDIHPTIPAGQYFIN(deITYNYPVHSFDGR	3405.6531	IPI00387318	IPI00387318	yes	no	3,4		4.9427E-19	118.24
RAN(deASTFAVPSPVNSADTR	2047.0083	IPI00119065	IPI00119065	yes	yes	2,3		0.0016381	85.203
RADIN(deGSNMETVIGHGIK	1910.9632	IPI00411145	IPI00411145	yes	no		3	0.0001119	111.22
QYDSFTFTASRN(deGTYK	1884.8642	IPI00134378	IPI00134378	yes	no	2,3		9.0794E-08	153.22
QYCTEQN(deATIVK	1453.6871	IPI00123658	IPI00123658	yes	no		2	0.0013169	115.34
QVVEN(deMTR	975.48076	IPI0011196C	IPI0011196C	yes	no		2	0.014527	97.431
QVTPIFFYFQN(deR	1558.7932	IPI00319509	IPI00319509	yes	no	2,3		0.0010868	127.37
QVSTIIN(deNTDK	1231.6408	IPI0039684C	IPI0039684C	yes	no		2	0.0003106	123.95
QVN(deGSVSGSQWNK	1389.6637	IPI0040885C	IPI0040885C	yes	yes		2	0.0036703	97.463
QVEIIEYPYHEQIAVVAPEIITGHN(deYTIK	3463.8028	IPI00223987	IPI00223987	yes	yes	3,4		3.057E-54	169.28

QVEEIVN(deHTGIR	1506.8154	IPI00263041	IPI00263041	yes	yes	2,3	0.0032485	103.76
QVAIQTFGN(deQTSIIPAGGAGYK	2220.1539	IPI0022871	IPI0022871	yes	yes	2,3,4	0	356.04
QTTAMDFSAN(deETVCVWHVGDSSAAQTQIK	3257.4758	IPI0011906	IPI0011906	yes	no	3,4	0.0081183	57.432
QTQVGIVQYGAN(deVTHEFNINIK	2359.1921	IPI00466371	IPI01026704	no	no	2,3	1.0814E-47	192.09
QTPEYQN(deR	1034.4781	IPI0015405	IPI0015405	yes	no	2	0.014885	97.635
QTIFFN(deGTR	1082.5509	IPI0015384	IPI0015384	yes	yes	2	0.010382	98.04
QTGDVTCN(deCTDGR	1482.5827	IPI0011906	IPI0011906	yes	yes	2	0.0073059	76.262
QSVGQN(deYSNVIAHIR	1684.8645	IPI00112271	IPI00112271	yes	yes	3	1.0184E-07	152.99
QSQPVHIIPMNETDHINMVFSN(deK	2678.2945	IPI0013350	IPI0013350	yes	yes	3,4	9.2848E-16	136.68
QSQPVHIIPMN(deETDHINMVFSNK	2678.2945	IPI0013350	IPI0013350	yes	yes	3,4	9.2848E-16	136.68
QSN(deGSAIVISSIAGK	1430.7729	IPI0011559	IPI0011559	yes	no	2,3	9.0879E-60	176.21
QSINTVN(deDTVVK	1403.7045	IPI00420867	IPI00420867	yes	yes	2	0.0008388	135.02
QSDYCWEIAPHMYFITPGQQPQPITNIIIVN(deKTGAK	4255.1235	IPI0032257	IPI0032257	yes	no	4	1.3473E-06	63.776
QSDYCWEIAPHMYFITPGQQPQPITNIIIVN(deK	3897.9222	IPI0032257	IPI0032257	yes	no	4	0.0003507	56.156
QRYN(deITAK	992.54033	IPI00130661	IPI00130661	yes	yes	2	2.654E-05	138.4
QRYEDIVIN(deETINK	1733.8948	IPI00285117	IPI00285117	yes	no	2,3	0.0038168	120.87
QQTECMVQQYSN(deYSVNGEPVNGR	2687.1704	IPI0039684	IPI0039684	yes	no	3	7.8348E-05	86.625
QQCIEEAQIEN(deETTGCSSK	2123.9099	IPI00128984	IPI00128984	yes	yes	2,3	1.5521E-11	158.58
QPIYIN(deCSCVTGGSASAK	1911.8819	IPI0030924	IPI0030924	yes	yes	2	3.1003E-28	183.6
QNPMTIGNVVI(deFDKVITNQESPYQNHTGR	3299.6357	IPI0012531	IPI0012531	yes	no	3,4	1.2336E-13	103.03
QNFSN(deITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no	2,3	1.2525E-57	216.71
QNAQDVIIKTN(deATK	1542.8366	IPI0033878	IPI0033878	yes	no	2,3	0.0037636	112.17
QN(deFSNITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no	2,3	1.2525E-57	216.71
QKNVNIYSIVN(deDSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	3,4	1.102E-37	183.74
QKNVN(deISYIVNDSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	3,4	1.102E-37	183.74
QKNITAFN(deETIFR	1580.8311	IPI0012470	IPI0012470	yes	yes	3	0.022834	75.479
QIYPYN(deSSNR	1240.5836	IPI0022982	IPI0022982	yes	yes	2	0.015124	79.148
QIYN(deITVR	1005.5607	IPI00623114	IPI00623114	yes	no	1,2	9.6091E-06	141.78
QIWDWSKHN(deITITQGK	1954.0061	IPI0012835	IPI0012835	yes	no	2	0.0002196	130.29
QINPPHTAN(deSSITSK	1593.8111	IPI0098839	IPI0098839	yes	yes	2,3	0.0006684	106.32
QINNGEIQPISEN(deTTITFMSTK	2465.2108	IPI00126834	IPI00126834	yes	no	3	2.4761E-48	150.69
QINAYN(deR	877.44061	IPI0047319	IPI0047319	yes	no	2	0.0060872	114.02
QIN(deITTEDDDIYHMTVPYGRPR	2633.2544	IPI00265291	IPI00265291	yes	yes	3	2.1149E-11	129.12
QIN(deISIVK	1026.6437	IPI0011511	IPI0011511	yes	yes	2	0.002456	119.53
QIN(deISDSIAVIGIAKPAHIYSK	2337.3056	IPI00463492	IPI00463492	yes	yes	3,4	2.3333E-06	100.92
QIN(deISDSIAVIGIAK	1540.8825	IPI00463492	IPI00463492	yes	yes	2	6.8199E-18	178.23
QIITEEKIPN(deNTQWITWSPEGHKIAYVVK	3508.8143	IPI0012581	IPI0012581	yes	no	4	3.1974E-18	115.5
QIITEEKIPN(deNTQWITWSPEGHK	2748.3871	IPI0012581	IPI0012581	yes	no	2,3,4	3.3148E-17	257.73
QIIQTQVAPAIHPPVSYN(deDTAPR	2602.3503	IPI0012898	IPI0012898	yes	no	3	1.3696E-55	190.67
QIINAIQIN(deNTAVGHAIVIPARR	2481.4292	IPI0083074	IPI0083074	yes	yes	3,4	0.0079252	73.928
QIINAIQIN(deNTAVGHAIVIPAR	2325.3281	IPI0083074	IPI0083074	yes	yes	3	8.2155E-11	161.99
QIIN(deISQIVYGPEGSDIVIHK	2298.2835	IPI0011650	IPI0011650	yes	no	2,3	5.441E-09	113.63
QIIAN(deNSIR	1140.6615	IPI00128024	IPI00128024	yes	yes	2	0.0005311	121.36
QIIAN(deSSAIEETIIGHQGR	2036.0651	IPI0011691	IPI0011691	yes	no	2,3	9.244E-53	205.98
QIGCADN(deGTVKPIPSDK	1798.8883	IPI0076010	IPI0076010	yes	no	2,3	4.9872E-06	130.21
QIGASPSDDIIFGVFAQSKPDSAEPVN(deR	2944.4567	IPI0013042	IPI0013042	yes	no	3,4	1.8754E-31	146.76
QIFFN(deGTETIR	1324.6776	IPI0033820	IPI0033820	yes	no	2	0.0021719	98.898
QHTVTTTTKGEN(deFTETDVK	2136.0335	IPI0012079	IPI0012079	yes	yes	2	0.008845	73.448
QHGQFSIAVVGIN(deITSIGIR	2109.1695	IPI0012119	IPI0012119	yes	no	3	6.7358E-06	107.03
QGPQAGGTTITIN(deGTHIDTGSKEDVR	2652.3103	IPI0040574	IPI0040574	yes	no	3,4	3.8207E-33	161.02
QGPQAGGTTITIN(deGTHIDTGSK	2153.0713	IPI0040574	IPI0040574	yes	no	2,3	2.3854E-16	260.06
QGEAIQKFQIIIRN(deISVVVATHSPTIAK	3301.8874	IPI0022141	IPI0022141	yes	no	4	0.0005651	64.779
QGDQYSCMVGHEAIPMN(deFTQK	2440.061	IPI0096897	IPI0096897	yes	no	2,3,4	7.2493E-19	149.52
QFWIFDVQNPDDVAKN(deSSK	2237.0753	IPI00331214	IPI00331214	yes	yes	2,3	1.4267E-14	152.94
QFFN(deASVQFDNMDPIIDYINQR	2674.2486	IPI0011784	IPI0011784	yes	yes	3	8.5003E-32	178.72
QEVMFITNVN(deSSSSSTQIYQAVSR	2675.2861	IPI00112614	IPI00112614	yes	yes	3	1.4201E-46	185.71
QEMNGTYVCHAFSSHGN(de)VTR	2293.9957	IPI0012297	IPI0012297	yes	no	3	0.0074829	73.138
QEMNGTY(deVCHAFSSHGNVTR	2293.9957	IPI0012297	IPI0012297	yes	no	3	0.0074829	73.138
QEIN(deDSIQVAER	1400.6896	IPI0032042	IPI0032042	yes	yes	2	7.4999E-07	156.08
QDPVSWNK(deTFEDISR	1820.8693	IPI0084869	IPI0084869	yes	yes	3	0.033913	68.034
QDIAISGN(deISSIYAMTQDK	2053.999	IPI0040574	IPI0040574	yes	no	2,3	9.4218E-20	282.72
QAWAIVGVIDGGSSSCN(deESVR	2191.0328	IPI00463492	IPI00463492	yes	yes	3	1.3848E-05	96.143
QASSPN(deSSTAQQQTATTQASMNIATTSAAQIISR	3450.6645	IPI0038077	IPI0038077	yes	no	3	0.011426	51.321
QAIQTMQSEFFYITNIIIN(deDTIEIR	2988.4903	IPI0011813	IPI0011813	yes	yes	2,3	4.7812E-67	204.31
PNIIIVITDDQDVEIGSMQVMN(deK	2571.2924	IPI0026803	IPI0026803	yes	yes	3	0.016014	54.225
NYTANATSSREEAWDY(deVQAQVK	2530.1724	IPI0010809	IPI0010809	yes	no	2,3	7.2953E-08	103.66
NYTANATSSREE(deAWDYVQAQVK	2530.1724	IPI0010809	IPI0010809	yes	no	2,3	7.2953E-08	103.66
NYN(deFTIACNTR	1500.7143	IPI0032257	IPI0032257	yes	no	2	0.0049593	100.19
NYN(deFTIACNTR	1344.6132	IPI0032257	IPI0032257	yes	no	2,3	1.402E-23	182.1
NYKNPN(deITISFTAER	1766.8951	IPI0013260	IPI0013260	yes	no	2,3	1.2767E-06	113.53
NYFHYN(deQSFPSPSYNIK	2017.9323	IPI0012926	IPI0012926	yes	yes	2,3	1.027E-17	170.78
NYEVQIFHVN(deATVTEEGTGIEFSR	2739.314	IPI0012322	IPI0012322	yes	yes	2,3,4	0	318.66
NVTVV(deIR	799.49159	IPI0046921	IPI0046921	yes	yes	2	0.007709	106.36
NVPGEIGINYN(deITADVAQK	2015.0324	IPI00130117	IPI00130117	yes	yes	3	1.5974E-12	142.94
NVNISYTVN(deDSFFPQRQPK	2253.1178	IPI0038117	IPI0038117	yes	yes	2,3,4	2.5524E-20	283.31
NVNISYIVNDS(deFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3,4	8.7255E-60	192.6
NVNIS(deYIVNDSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3,4	8.7255E-60	192.6
NVN(deMSVICPTTIR	1503.7538	IPI00129867	IPI00129867	yes	no	2	0.0025999	127.71
NVN(deISYTVNDSFFPQRQPK	2253.1178	IPI0038117	IPI0038117	yes	yes	2,3,4	2.5524E-20	283.31
NVITNQTINN(deDTVASSFIK	2078.0644	IPI00471264	IPI00471264	yes	no	3	1.4219E-06	119.08
NVITN(deQTINNDTVASSFIK	2078.0644	IPI00471264	IPI00471264	yes	no	3	1.4219E-06	119.08
NVIIWGN(deHSSTQYDPVNHAK	2279.1083	IPI00336324	IPI00336324	yes	yes	3	3.7215E-15	157.11
NVAIVAGDTGN(deATGIGEQGPTR	2097.0451	IPI0012227	IPI0012227	yes	no	2,3	2.1224E-16	261.06
NTQADVNASWSVISN(deSTRHEIER	2726.3372	IPI0013218	IPI0013218	yes	yes	3,4	5.3865E-24	141.6
NTQADVNASWSVISN(deSTR	2062.0079	IPI0013218	IPI0013218	yes	yes	2,3	7.4791E-15	263.55
NTQADVIN(deASWSVISNSTRHEIER	2726.3372	IPI0013218	IPI0013218	yes	yes	3,4	5.3865E-24	141.6

NTQADVIN(deASWSVISNSTR	2062.0079	IPI0013218€	IPI0013218€	yes	yes	2,3	7.4791E-15€	263.55
NTGEIN(deITSIIDREETPYFIITGYAIDSR	3300.6514	IPI0011579€	IPI0011579€	yes	no		3 8.73E-10	92.275
NTDKENPYIGIGN(deYTICR	2127.0055	IPI0046823€	IPI0046823€	yes	no	2,3	0.0001324	113.01
NTAFNITCQAVGPPEPVNIFVWQN(deSSR	3045.4767	IPI00121254	IPI00121254	yes	yes		3 2.6795E-26	137.52
NTAFN(deITCQAVGPPEPVNIFVWQNSSR	3045.4767	IPI00121254	IPI00121254	yes	yes		3 2.6795E-26	137.52
NSQFDMN(deSTDIAIK	1582.7297	IPI0034606€	IPI0034606€	yes	yes		2 0.0013415	119.54
NSNSN(deVIQVDQSGIGIPSRDYYINKTENEK	3381.6437	IPI0039684€	IPI0039684€	yes	no	3,4	9.736E-05	75.71
NSKYNYTI(deSINGK	1663.8206	IPI0022142€	IPI0022142€	yes	yes		3 0.034934	89.43
NSK(deYYNYTISINGK	1663.8206	IPI0022142€	IPI0022142€	yes	yes		3 0.034934	89.43
NQSVGDP(deNVDIIR	1425.7212	IPI00127447	IPI00127447	yes	yes		2 0.0035693	96.591
NQN(deSTCIGTDINR	1491.6736	IPI0012631€	IPI0012631€	yes	yes		2 0.014091	69.716
NQKDEIN(deETDIK	1445.6998	IPI0093088€	IPI0093088€	yes	no		2 0.014423	79.875
NQIVEI(deEKVVIHPNHSVVDIGIIK	2692.5276	IPI0040914€	IPI0040914€	yes	yes		3 2.7178E-15	122.19
NPSANTFIHIN(deASSFR	1774.8751	IPI0031553€	IPI0031553€	yes	yes	2,3	0.0001994	117.67
NPNN(deNTIHPNIR	1402.7066	IPI0031950€	IPI0031950€	yes	no	2,3	7.9076E-09	136.38
NPIGQAQSAVVIN(deVTER	1794.9588	IPI0011929€	IPI0011929€	yes	no	2,3	1.7933E-59	166.76
NPCTSEQN(deCTSPFSYK	1918.7826	IPI00132474	IPI00132474	yes	yes	2,3	3.6897E-08	152.32
NNQTECFNHV(deR	1417.6157	IPI0012466€	IPI0012466€	yes	no		2 0.0061722	83.182
NNQT(deECFNHVR	1417.6157	IPI0012466€	IPI0012466€	yes	no		2 0.0061722	83.182
NNGAGYF(deIEHIAFK	1579.7783	IPI0011188€	IPI0011188€	yes	no		2 0.055287	52.527
NMICQWDPGRETYIETN(deYTIK	2631.2098	IPI0012015€	IPI0012015€	yes	yes		3 9.8061E-09	116.13
NKNPQMN(deFTEANEACK	1894.8302	IPI0030824€	IPI0030824€	yes	yes		3 0.0007427	110.77
NKANIQFGEN(deGTTISAVTNK	2106.0705	IPI00127447	IPI00127447	yes	yes	2,3	9.709E-155	263.55
NITVIEPVTQPFIVQTN(de)TTVK	2341.2893	IPI0010853€	IPI0010853€	yes	no	2,3	1.3826E-14	132.79
NITVI(deEPVTQPFIVQTN)TTVK	2341.2893	IPI0010853€	IPI0010853€	yes	no	2,3	1.3826E-14	132.79
NITAFNET(deIFR	1324.6776	IPI0012470€	IPI0012470€	yes	yes		2 0.0001353	138.45
NIQVYN(deATSNSITVK	1650.8577	IPI0012143€	IPI0012143€	yes	no		2 2.3853E-05	140.96
NIQAVNEIATISQCN(deDTSSAAMVQCIR	3106.4846	IPI0013834€	IPI0013834€	yes	no	3,4	2.3937E-26	135.76
NIPWYVIAGNHDHIGN(deVSAQIAYSK	2766.3878	IPI00137491	IPI00137491	yes	yes	3,4	0.003749	60.991
NIN(deVTSIGFR	1119.6037	IPI00468814	IPI00468814	yes	yes		2 0.009691	87.298
NIMTIVHFYN(deK	1378.7067	IPI0011982€	IPI0011982€	yes	no		2 0.0029716	94.767
NIMIDIQKDTAV(deEGEEIEVNCTAMASKPATTIR	3647.7845	IPI0085672€	IPI0085672€	yes	no		4 0.0013731	56.903
NIKEE(deKANVVASAIQIPQK	2150.2059	IPI0015314€	IPI0015314€	yes	yes		3 2.3302E-12	147.09
NIIPTMN(deGSCTFHK	1618.7596	IPI00130271	IPI00130271	yes	no		3 0.0082609	72.089
NIIPN(deITTSYIK	1375.7711	IPI0047108€	IPI0047108€	yes	no		2 0.0026085	93.345
NIINDYVSN(deQTQGMKEIIEIDER	2921.4441	IPI0013183€	IPI0013183€	yes	no	3,4	2.1287E-19	134.32
NIINDYVSN(deQTQGMK	1836.904	IPI0013183€	IPI0013183€	yes	no	2,3	6.5092E-12€	250.52
NIIGIDENFVIN(deSSTEHR	2057.0178	IPI0040660€	IPI0040660€	yes	yes	2,3	2.0166E-75	223.11
NIGPN(deTTSTTITSDDFKPGVR	2220.1022	IPI00118291	IPI00118291	yes	no		3 5.9244E-05	93.226
NIGN(deTSEGPR	1043.4996	IPI0022170€	IPI0022170€	yes	yes		2 0.0028397	102.53
NIGGIETEDDYGYQGHVQTCN(deFSAQMAK	3132.3553	IPI0012676€	IPI0012676€	yes	yes	3,4	8.6247E-27	139.04
NIGFN(deCTTSQGK	1325.6034	IPI00224294	IPI00224294	yes	yes		2 0.0034809	84.892
NIFIN(deHSETASAK	1430.7154	IPI0040914€	IPI0040914€	yes	yes	2,3	4.2504E-32	190.27
NIADQGN(deQTAAIK	1342.6841	IPI0045870€	IPI0045870€	yes	no		2 0.0027411	130.2
NI(deTSPVGVQPIINEHTFCAGITK	2495.2842	IPI0040914€	IPI0040914€	yes	yes		3 5.1478E-06	92.563
NHFTVAQAEAFN(deK	1475.7157	IPI0062611€	IPI0062611€	yes	yes		2 0.0051102	79.466
NGNATI(deIR	857.47191	IPI0098582€	IPI0010999€	no	no		2 1.6082E-17	131.5
NGNATI(deIR	857.47191	IPI0098582€	IPI0010999€	no	no		2 1.6082E-17	131.5
NGNA(deTIIR	857.47191	IPI0098582€	IPI0010999€	no	no		2 1.6082E-17	131.5
NGNA(deTIIR	857.47191	IPI0098582€	IPI0010999€	no	no		2 1.6082E-17	131.5
NGIYN(deITVIAIDADGR	1703.8842	IPI0013820€	IPI0013820€	yes	no	2,3	1.7403E-09	160.25
NGIPDEQIIVMMYDDIANSEENPTPGVVINRPN(deGTDVYK	4317.057	IPI00130627	IPI00130627	yes	yes		4 1.358E-07	65.883
NGIASGSGN(deCSTGPNGDGSFHAWSIIEVK	2918.3253	IPI00322497	IPI00322497	yes	yes		3 1.1877E-42	166.65
NGHITN(deYTVVYR	1435.7208	IPI00110264	IPI00110264	yes	yes		2 0.010489	73.466
NGDAYGYYN(de)DSIK	1478.6314	IPI00471081	IPI00471081	yes	yes		2 0.0027768	115.91
NGDAYG(deYYNDSIK	1478.6314	IPI00471081	IPI00471081	yes	yes		2 0.0027768	115.91
NFVIN(deMTCR	1153.5372	IPI00222321	IPI00222321	yes	no		2 0.013802	92.538
NFN(deDSIHSISQAIR	1600.7958	IPI00263041	IPI00263041	yes	yes		2 0.0022437	93.823
NF(deTAADWGHRSR	1260.5636	IPI0033988€	IPI0033988€	yes	no		2 0.042949	59.57
NF(deNVEKINGEWHTIIIASDKR	2483.2921	IPI0096896€	IPI0094471€	no	no		3 0.0090137	77.969
NEIMIN(deSSIMR	1306.6373	IPI0037869€	IPI0037869€	yes	no		2 0.02908	59.155
NEEVKN(deMSVEINSK	1619.7825	IPI0012820€	IPI0012820€	yes	yes		2 0.0155	77.068
NDTGPYVCET(deR	1310.5561	IPI0010853€	IPI0010853€	yes	no		2 0.0003038	122.46
NDRN(deISDEIFIR	1490.7478	IPI0031180€	IPI0031180€	yes	no		2 0.015203	79.492
NCKPIIDN(deVSFFGVK	1849.976	IPI00122581	IPI00122581	yes	no		3 0.000326	126.48
NAVN(deCTYKNEDDCVVR	1955.8466	IPI00266264	IPI00266264	yes	yes		2 0.0030276	97.836
NATIAEQAKI(dePATEKPVIIISK	2221.2682	IPI0012334€	IPI0012334€	yes	yes		3 3.6458E-21	159.81
NAN(deCSTVSPGQTQCTCQK	2039.8459	IPI0046760€	IPI0046760€	yes	yes	2,3	0.0090432	66.436
NAIQAFGN(deGTDVNMSPK	1762.8308	IPI0011635€	IPI0011635€	yes	no	2,3	8.1226E-28	183.74
NAIQAFGN(deGSDVTMWQPAPPVQTTTATTTAFR	3479.678	IPI00128641	IPI00128641	yes	no		4 0.0001565	59.567
NAIN(deITFHAQNIPEGGAYEAEIR	2487.2142	IPI0011597€	IPI0011597€	yes	yes		3 0.0004892	90.22
NAIKEGDNITIQ(deCIGNGNPPPEEFMFYIPGQPEGIR	4014.9244	IPI0012137€	IPI0012137€	yes	no		4 0.025875	47.66
NAIK(deEGDNITIQ)CIGNGNPPPEEFMFYIPGQPEGIR	4014.9244	IPI0012137€	IPI0012137€	yes	no		4 0.025875	47.66
NACCSVN(deTSQEIHK	1646.7141	IPI0011315€	IPI0011315€	yes	yes		2 0.0021232	103.21
N(deTTSYPPMCSQDAVGGQVISEIFTNRK	2999.4117	IPI0038728€	IPI0038728€	yes	yes		3 1.3267E-10	100.76
N(deTTSYPPMCSQDAVGGQVISEIFTNR	2871.3167	IPI0038728€	IPI0038728€	yes	yes		3 1.074E-39	175.28
N(deTTSAAMVHCIR	1359.6387	IPI0013121€	IPI0013121€	yes	yes		2 0.0011773	117.93
N(deSTIQAANIAGIK	1299.7147	IPI00222937	IPI00222937	yes	no		2 2.0439E-32	195.1
N(deSTICDICIGPIK	1489.7269	IPI00987951	IPI00987951	yes	no		2 8.9575E-16	171.26
N(deMTIFSDIVAEK	1366.6803	IPI00621027	IPI00621027	yes	no		2 0.0021857	102.5
N(deFTDVHPDYGAR	1390.6266	IPI0031205€	IPI0031205€	yes	no		2 0.0055044	79.492
N(deATVVWMK	947.48987	IPI0012137€	IPI0012137€	yes	no		2 0.012477	103.56
N(deATTYPPMCSQDAAR	1681.7188	IPI0012839€	IPI0012839€	yes	yes		2 0.0003761	124.16
N(deATSYPMCSQDAGWAK	1882.7978	IPI0013834€	IPI0013834€	yes	yes		2 0.044642	52.372
N(deATIVNEADKIR	1342.7205	IPI0031950€	IPI0031950€	yes	no		2 0.0036373	115.34
N(de)ATIAEQAK	944.49271	IPI0012334€	IPI0012334€	yes	yes		2 0.033121	72.643

MYVTN(deDTEVAENNYEAIKDFFR	2668.2115	IPI0065853E	IPI0065853E	yes	no	2,3	1.1535E-08	117.67
MYSEGSDIVPQSN(deETAIHYFKK	2543.2002	IPI0013114E	IPI0013114E	yes	no	2,3	3.5245E-15	139.08
MYSEGSDIVPQSN(deETAIHYFK	2415.1053	IPI0013114E	IPI0013114E	yes	no	2,3	1.3892E-14	132.51
MYN(deNCEVVIGNIEITYVQR	2314.1086	IPI0012119C	IPI0012119C	yes	no	3	0.014509	60.489
MWIENITNGN(deMTS	1509.6592	IPI0011694E	IPI0011694E	yes	no	2	5.8975E-16	170.66
MWIEN(deITNGNMTS	1509.6592	IPI0011694E	IPI0011694E	yes	no	2	5.8975E-16	170.66
MVCDIGNPMVTGTN(deFSIGIR	2280.1065	IPI00345112	IPI00345112	yes	yes	3	9.4509E-05	89.859
MVSIDIPYFADVVPIN(deMTMK	2382.2037	IPI0041114E	IPI0041114E	yes	no	2,3	1.2347E-05	91.725
MVN(deTTFICTATNAVGTGR	1912.9135	IPI0010937E	IPI0010937E	yes	no	2,3	1.7831E-13	259.18
MVIWN(deDSTIR	1233.6176	IPI0013597E	IPI0013597E	yes	yes	2	0.0059477	94.767
MTQIIGITPN(deATHIHRPPR	2152.1688	IPI0013032E	IPI0013032E	yes	yes	3,4	0.011225	70.96
MTQESAIIFPFIN(deK	1637.8487	IPI0085778C	IPI0085778C	yes	no	2,3	0.0013035	125.28
MTISSIKDDIGACRN(deCCSVTK	2415.1015	IPI0022335E	IPI0022335E	yes	yes	3	0.0072295	79.311
MTISQN(deNSIIR	1275.6605	IPI0010853E	IPI0010853E	no	no	2	5.8239E-09	160.52
MSVINFEEN(deKTAGK	1597.7592	IPI00308971	IPI00308971	yes	yes	2	0.0060192	94.09
MSVINFEEN(deK	1240.558	IPI00308971	IPI00308971	yes	yes	2	0.015191	78.653
MSQHPIDIQEDFNNATIVN(deASSIIPK	2881.428	IPI0076281E	IPI0076281E	yes	yes	3	5.1972E-06	82.593
MSQHPIDIQEDFNN(deATIVNASSIIPK	2881.428	IPI0076281E	IPI0076281E	yes	yes	3	5.1972E-06	82.593
MSPWSN(deWSECDPCIK	1895.7641	IPI0023071E	IPI0023071E	yes	no	3	0.0004064	115.06
MSIVMPAMAPN(deETVSGR	1789.8525	IPI0102733E	IPI0102733E	yes	no	2,3	0.0004062	97.417
MRSPGAQ(deDNVSVSQGMR	1818.8465	IPI0034858E	IPI0034858E	yes	no	3	1.3048E-08	149
MQVVSND(deGTVTTAIWR	1661.8559	IPI0033117E	IPI0033117E	yes	no	2,3	1.2155E-11	161.84
MPSQASAGNVYPQPIIN(deSSMCIEDSR	2851.2939	IPI0022475E	IPI0022475E	yes	yes	3	2.1701E-20	132.72
MPFPIDQDFYVSPTFQDIIN(deR	2542.2202	IPI0031817E	IPI0031817E	yes	yes	3	1.0464E-05	97.32
MNCFQGTN(deASAIEK	1569.6916	IPI0088221E	IPI0088221E	yes	yes	3	0.0016048	108.72
MN(deYTGGDTCCHK	1282.5071	IPI00308971	IPI00308971	yes	yes	2	0.0074039	80.522
MN(deITSIAPIEK	1328.7374	IPI0038029E	IPI0038029E	yes	no	2	0.0037129	82.069
MISAFN(deATSGK	1125.5488	IPI0046699E	IPI0046699E	yes	no	2	0.00258	96.64
MIPFIATIGTAAIN(deSSNP	2058.1183	IPI0038116C	IPI0038116C	yes	no	3	0.0094418	62.203
MIEN(deGSISFIPTIR	1576.8283	IPI00123194	IPI00123194	yes	yes	2,3	1.1657E-10	163.51
MHIN(deGSNVQVIHR	1503.7729	IPI0011906E	IPI0011906E	yes	yes	2,3,4	0.0005939	140.08
MGDREAIGN(deASQIFDSWIK	2137.0262	IPI0013458E	IPI0013458E	yes	yes	2,3	3.0604E-15	158.92
MGCQHHCVPPTSPGPTCYCN(deSSFQIQADGK	3323.3675	IPI0011906E	IPI0011906E	yes	no	3,4	4.7971E-06	81.315
MFSQN(deDTR	997.42873	IPI0012925C	IPI0012925C	yes	yes	2	9.3267E-06	138.4
MEISVGAIQAN(deR	1287.6605	IPI00108811	IPI00108811	yes	yes	2	0.000912	134.08
MEAHNVSAFVN(deFSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4	2.9312E-47	192.16
MEAHN(deVSAFVNFSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4	2.9312E-47	192.16
MDYNSFQGTSPN(deETK	1717.7254	IPI00876541	IPI00876541	yes	no	2	2.3296E-17	172.91
MDFIIFN(deYSAPSYIR	1835.8916	IPI0055350E	IPI0055350E	yes	yes	2,3	1.152E-11	162.29
MAIQYGSQNNQVAFPIITYN(deVTTHIEAIER	3562.7879	IPI00621027	IPI00621027	yes	yes	3,4	3.7698E-67	180.7
MAAANVSITQPESTGEPNN(deMTIIAEEAR	2944.3906	IPI0040001E	IPI0040001E	yes	no	3	0.0061268	49.793
MAAAN(deVVSITQPESTGEPNNMTIIAEEAR	2944.3906	IPI0040001E	IPI0040001E	yes	no	3	0.0061268	49.793
MAAANATGRPIAFSCSWPAYEGGIPPKVN(deYTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no	4	2.0001E-05	62.393
MAAAN(deATGRPIAFSCSWPAYEGGIPPKVNYTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no	4	2.0001E-05	62.393
MAAAN(deATGR	974.49675	IPI0031559E	IPI0031559E	yes	no	2	1.7586E-07	125.74
KYQNTIN(deCSVNV	1480.7456	IPI0042083E	IPI0042083E	yes	no	2,3	0.0022435	124.12
KYHDYYITSTS(deNGSIEGIENR	2446.1401	IPI00130754	IPI00130754	yes	yes	3	0.0004596	88.565
KYFDQVDIS(deNGIDWSDHDK	2279.0859	IPI0013345E	IPI0013345E	yes	yes	3	1.9155E-05	109.42
KYEQAK(deNISQDIEK	1692.8683	IPI0040001E	IPI0040001E	yes	no	2,3	6.999E-32	193.96
KWPERISAI(deDNIINHSSIFIK	2480.354	IPI0012334E	IPI0012334E	yes	yes	3,4	6.789E-05	97.502
KWGH(deNVTEFQQR	1528.7535	IPI0075438E	IPI0075438E	yes	yes	2,3	0.0086339	81.017
KVYEEVIN(deVTPNDGFAK	1921.9785	IPI0062489E	IPI0062489E	yes	no	3	0.0061653	77.746
KVPSN(deSTETVIESDQFQPGVR	2317.155	IPI0011929E	IPI0011929E	yes	no	2,3	6.0624E-31	176.94
KVIIN(deNSIDEPR	1396.7674	IPI0041114E	IPI0041114E	yes	no	2,3	0.0051425	93.345
KVEVEPIN(deSTAVHVSWK	1922.0262	IPI00110264	IPI00110264	yes	yes	2,3	1.5529E-14	166.48
KVEVEAVN(deATAVK	1356.7613	IPI0060806E	IPI0060806E	yes	no	2,3	0.005095	118.08
KVEAEAIN(deATAIR	1384.7674	IPI0075485E	IPI0075485E	yes	no	2	0.010249	79.337
KVDN(deASIVADDMR	1432.698	IPI0035646E	IPI0035646E	yes	no	2	0.0059832	92.773
KTYAVYDIFDTAMIN(deNSR	2121.0201	IPI0022679C	IPI0022679C	yes	no	2,3	1.4231E-15	170.11
KTTIEN(deFTCPEYK	1629.7709	IPI0042081C	IPI0042081C	yes	yes	3	0.0059887	90.731
KTGVHDGDFEY(deNITTTIAAINK	2407.202	IPI0010884E	IPI0010884E	yes	no	3	4.7629E-11	125.18
KTGEA(deNITQIYTQEAIQIQTHAR	2875.4464	IPI0031009C	IPI0031009C	yes	no	3,4	1.2541E-38	170.59
KTCNPETFPIRN(deESIQCP	2518.2057	IPI0064918E	IPI0064918E	yes	no	3	0.0001386	93.381
KT(deNQSCIEVIDSTEKVNP	2637.3068	IPI0031005E	IPI0031005E	yes	no	3	6.213E-25	162.43
KT(deNQSCIEVIDSTEK	1750.8407	IPI0031005E	IPI0031005E	yes	no	2,3	4.057E-05	141.85
KSPGYVIDIIVTPQN(deK	1770.988	IPI0010994E	IPI0010994E	yes	yes	3	0.0003798	118.52
KSDTQNIIN(deVSTGR	1694.8588	IPI01023214	IPI01023214	yes	no	2,3	1.9023E-07	153.39
KSCHTAVGTSEGNVPMGIIN(deNQTG	3081.4107	IPI0047108C	IPI0047108C	yes	no	4	0.023696	48.489
KQYDSFTFTASR(deNGTYK	2012.9592	IPI0013437E	IPI0013437E	yes	no	2	0.010868	88.385
KQVTPIFFYFQ(deNR	1686.8882	IPI0031950E	IPI0031950E	yes	no	2,3	4.4541E-06	152.85
KQEIPSN(deCSIPYHVYNIK	2189.0939	IPI0031130E	IPI0031130E	yes	yes	3	0.015554	67.646
KPISQFEAYVN(deASGEHGIVVFSIGSMVSEIPEKK	3805.9237	IPI00134691	IPI00134691	yes	no	4,5,6	5.399E-17	94.15
KPIIGHYKPDIAVVIEN(deGTSIDR	2635.4334	IPI0041079E	IPI0041079E	yes	no	3,4	3.3613E-05	88.396
KNVNISYTV(deNDSFFPQRPQK	2381.2128	IPI0038117E	IPI0038117E	yes	yes	2,3,4,5	3.568E-154	260.97
KNV(deNISYTVNDSFFPQRPQK	2381.2128	IPI0038117E	IPI0038117E	yes	yes	2,3,4,5	3.568E-154	260.97
KNIQAVNEIATISQC(deNDTSSAAMVQCIR	3234.5795	IPI0013834E	IPI0013834E	yes	no	3,4	0.0004322	68.309
KNACCSV(deNTSQEIHK	1774.8091	IPI0011315E	IPI0011315E	yes	yes	3	0.0041651	88.282
KN(deITSPVGVQPIINEHTFCAGITK	2623.3792	IPI0040914E	IPI0040914E	yes	yes	3	1.6827E-15	123.36
KN(deITDIVEGAKK	1314.7507	IPI0064918E	IPI0064918E	yes	no	3	0.01575	100.04
KN(deITDIVEGAK	1186.6558	IPI0064918E	IPI0064918E	yes	no	2	0.0007586	119.39
KN(deISEIWDAYCYR	1716.793	IPI0098726E	IPI0098726E	yes	no	2,3	0.012174	77.912
KMVIW(deNDSTIR	1361.7126	IPI0013597E	IPI0013597E	yes	yes	3	0.026268	73.499
KKENGVFEEISN(deSSGR	1779.8751	IPI00757771	IPI00757771	yes	no	2,3	2.8525E-05	121.31
KIVYIEHNIEK(deNSTK	1928.0731	IPI0032119C	IPI0032119C	yes	no	2	0.048139	70.235
KITDVETQVIN(deQTSR	1730.9163	IPI0011435C	IPI0011435C	yes	yes	2	0.0033521	91.657
KITDVEAQVIN(deQTTR	1714.9214	IPI0013260E	IPI0013260E	yes	yes	3	0.0007909	124.42

KISTSPFAIN(deITMIPK	1759.9906	IPI00666034	IPI00666034	yes	no		3	1.386E-05	141.34
KISTN(deITIVCKPGDIESAPVIR	2410.3254	IPI00308971	IPI00308971	yes	yes		3	9.1276E-21	157.22
KINIDGS(deNYTIK	1477.814	IPI00119063	IPI00119063	yes	yes	2,3		4.6494E-05	150.26
KINASIVTSFVEIPIVSN(deVSIR	2385.3631	IPI00323857	IPI00323857	yes	no		3	3.3065E-11	127.17
KIN(deASIVTSFVEIPIVSNVSIR	2385.3631	IPI00323857	IPI00323857	yes	no		3	3.3065E-11	127.17
KIIASPNEEN(deMTEIISMR	2075.0391	IPI00322575	IPI00322575	yes	no	2,3,4		2.249E-15	168.05
KIDFIVIN(deETR	1346.7558	IPI00125813	IPI00125813	yes	no	2,3		0.0006611	129.37
KHYQVTGYGIN(deGTGDSNDFWR	2414.104	IPI00221669	IPI00221669	yes	no		3	0.0034022	92.307
KGQNMVCGMGCDN(deDSIVQQIFNAEIDTYTR	3591.5851	IPI0013260C	IPI0013260C	yes	no	3,4,5		1.6478E-67	185.06
KGN(deNTINPFIIPSASDVPTGCPNQQWVPYAGHCYR	3916.8202	IPI0012618E	IPI0012618E	yes	yes		4	9.3157E-08	74.13
KGMWSEGN(deGSHTIR	1558.7311	IPI00123129	IPI00123129	yes	no		3	0.0037489	104.95
KGFCEADN(deSTVSENNPEDWPVNTEGCMK	3343.3704	IPI0010809E	IPI0010809E	yes	yes	3,4		2.847E-10	97.124
KGCADYCN(deQTITK	1557.6916	IPI0098726E	IPI0098726E	yes	no	2,3		0.0069709	105.65
KFPVFPQKEN(deVTATIVEIGR	2272.258	IPI00134691	IPI00134691	yes	yes	2,3,4		1.5844E-89	171.29
KFN(deSTQIAAMAPEHEEPR	2054.9844	IPI00856861	IPI00856861	yes	no		3	1.0772E-14	162.59
KEQETCIAPEIEHGN(deYSTTQR	2490.1445	IPI00122117	IPI00122117	yes	yes		3	1.0059E-17	145.02
KENGVFEEISNS(deSGR	1651.7802	IPI00757771	IPI00757771	yes	no	2,3		5.7041E-13	123.76
KENG(deVFEEISNSSGR	1651.7802	IPI00757771	IPI00757771	yes	no	2,3		5.7041E-13	123.76
KEN(deSSYQVINWR	1522.7528	IPI0015331E	IPI0015331E	yes	yes	2,3		0.0023017	125.82
KEN(deSSEICSNNGECVCGQCVCVR	2646.0349	IPI00132474	IPI00132474	yes	no		3	5.1846E-21	154.49
KEDSCQIN(deYSEGPCIGMQR	2400.0144	IPI00127352	IPI00127352	yes	yes	2,3		8.3747E-42	195.96
KDTCAQECSHFN(deITKVESR	2309.0529	IPI00132474	IPI00132474	yes	no		3	0.012911	80.859
KDTCAQECSHFN(deITK	1837.8087	IPI00132474	IPI00132474	yes	no	2,3		0.0007763	119.62
KDGSQDFN(deETWENYEK	1988.8388	IPI0012820E	IPI0012820E	yes	yes		2	0.0052475	81.594
KCQEAIN(deATCK	1321.6119	IPI00314443	IPI00314443	yes	no		3	0.011328	84.658
KCNSDNISYVIHCEPEN(deNTK	2421.0689	IPI00323053	IPI00323053	yes	no		3	0.0001521	93.381
KCNSDN(deISYVIHCEPENNTK	2421.0689	IPI00323053	IPI00323053	yes	no		3	0.0001521	93.381
KCEVICN(deQSNKPITITVEQSR	2503.2523	IPI00626537	IPI00626537	yes	yes		3	4.2044E-10	121.82
KCEAN(deITISSPAR	1445.7297	IPI00894972	IPI00894972	yes	no	2,3		0.0073163	104.41
KAWGISVINP(deNKTK	1554.8882	IPI0098909E	IPI0098909E	yes	yes	2,3,4		9.5788E-05	150.05
KAFITN(deFSMIIDGVTYPGVVKEK	2556.3662	IPI00312711	IPI00312711	yes	no	3,4		7.7626E-21	152.13
KAFITN(deFSMIIDGVTYPGVVK	2299.2286	IPI00312711	IPI00312711	yes	no	2,3,4		6.877E-18	146.72
IYWTGDGNISMANMDGSN(deHTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes	3,4		5.4095E-38	156.74
IYWTGDGNIS(deMANMDGSNHTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes	3,4		5.4095E-38	156.74
IYWISSGNHTIN(deR	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		2.2933E-123	254.18
IYWISSGN(deHTINR	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		2.2933E-123	254.18
IYVIDGTQN(deDTAFVFR	1954.9789	IPI0030865E	IPI0030865E	yes	no	2,3		5.3282E-07	136.36
IYSDQCHHNISIIPPPTEIVCN(deR	2762.3269	IPI00123442	IPI00123442	yes	yes		3	1.2492E-06	99.409
IYSDQCHHN(deISIIPPPTEIVCNR	2762.3269	IPI00123442	IPI00123442	yes	yes		3	1.2492E-06	99.409
IYPPSSIPQGAEYN(deISAIVTIATK	2532.3476	IPI00122592	IPI00122592	yes	yes	3,4		0.016346	52.09
IYPIEN(deITAPDPHPVDSIPPVAYNPWMDIR	3542.7908	IPI01023131	IPI01023131	yes	no	3,4		0.0029976	50.505
IYNVTHQFCN(deASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3		4.865E-96	235.95
IYN(deVTHQFCNASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3		4.865E-96	235.95
IYIETIPN(deTSIIPFHNEGWSSIR	2912.5436	IPI0031479E	IPI0031479E	yes	yes		3	4.6425E-06	87.326
IYIEIGQMPTQESTN(deSSDSVSATAIVEVTEEFDR	3802.7731	IPI00122973	IPI00122973	yes	no		4	4.729E-14	97.352
IYIDHNN(deITR	1257.6466	IPI00120187	IPI00120187	yes	yes	2,3		3.9168E-07	141.88
IYAGMVSIMDEAVGN(deVTK	1896.9325	IPI0065235E	IPI0065235E	yes	no	2,3		4.6489E-09	145.91
IWVN(deSSDGISPVIGK	1570.8355	IPI00848693	IPI00848693	yes	yes	2,3		0.0001794	132.84
IWVHNGAPVN(deASASCR	1737.8369	IPI0046413E	IPI0046413E	yes	yes	2,3		0.0001814	121.13
IWRGPN(deVTVITGTR	1681.9628	IPI0087726C	IPI0087726C	yes	no		3	0.007667	82.908
IWN(deSTFIEEYSK	1515.7246	IPI0042083E	IPI0042083E	yes	no		2	0.0015664	110.31
IWIPVN(deITWADIEDKDGR	2140.0953	IPI00126253	IPI00126253	yes	no	2,3		2.3632E-15	169.28
IWIPVN(deITWADIEDK	1811.9458	IPI00126253	IPI00126253	yes	no	2,3		0.0003541	126.09
IWEATN(deSSIQQIR	1672.8533	IPI0064909C	IPI0064909C	yes	no	2,3		3.2969E-07	158.04
IWDPSHPGIQN(deISR	1705.8536	IPI0033820E	IPI0033820E	yes	no	2,3		0.0003182	127.36
IVYN(deHSSGR	1031.5148	IPI0013350C	IPI0013350C	yes	yes		2	3.5773E-05	132.88
IVVN(deVSDKNDHAPWFTSPSYDGR	2603.2405	IPI00623114	IPI00623114	yes	no		3	0.0009128	79.461
IVTQTIPCN(deKTIFWSK	1935.0288	IPI0030796E	IPI0030796E	yes	yes	2,3		0.0001896	131.56
IVTQTIPCN(deK	1172.6223	IPI0030796E	IPI0030796E	yes	yes		2	1.3483E-07	147.75
IVPCEFGVIYPIAEN(deFSR	2110.0557	IPI0012190E	IPI0012190E	yes	no	2,3		7.7403E-09	145.46
IVKIPSGTIVISN(deATEGDGGIYR	2359.2747	IPI0012915E	IPI0012915E	yes	no		3	2.4796E-111	158.92
IVIYIEHNIKEN(deSTKEEIIAAIEK	2796.5273	IPI0032119C	IPI0032119C	yes	no	2,3,4		5.7562E-133	236.95
IVIYIEHNIKEN(deSTK	1799.9781	IPI0032119C	IPI0032119C	yes	no	2,4		0.001121	124.25
IVIWTAEQGGIGASQYYEIHKAN(deISK	3004.5294	IPI0012605C	IPI0012605C	yes	no		4	0.0005103	75.064
IVIIDPAISN(deNSFSSNPYPYDR	2651.3231	IPI00848693	IPI00848693	yes	yes	2,3,4		1.0257E-13	112.88
IVGSPFIGCTVVN(deK	1489.7963	IPI0013480E	IPI0013480E	yes	no	2,3		1.44E-32	191.79
IVGGTN(deASIGEWPPQVSIQVK	2268.1903	IPI00113057	IPI00113057	yes	yes	2,3		1.669E-25	167.51
IVFTHPN(deWTIS	1313.6768	IPI00125262	IPI00125262	yes	yes		2	0.0037563	91.549
IVEDIESFIKPYSVVEEQKN(deITSCPDGAPFIQHGPDYR	4278.0579	IPI00124221	IPI00124221	yes	yes	4,5		9.1521E-14	97.312
IVDVN(deITSEGKVK	1400.7875	IPI0011352E	IPI0011352E	yes	no	2,3		0.0072112	131.66
IVDVN(deITSEGK	1173.6241	IPI0011352E	IPI0011352E	yes	no		2	3.8899E-07	154.36
IV(deVPINNRENISDPTSPIRR	2289.2553	IPI0013692E	IPI0013692E	yes	no	2,3		0.0004885	93.754
IV(deVPINNRENISDPTSPIR	2133.1542	IPI0013692E	IPI0013692E	yes	no		2	2.1047E-41	196.71
ITYN(deESR	881.4243	IPI01008227	IPI01008227	yes	no		2	0.0068777	111.74
ITWSNAN(deGTASYR	1439.6793	IPI0046942E	IPI0046942E	yes	no		2	0.0031956	88.075
ITVVYAEN(deGTVIQGTTVASVYK	2312.2264	IPI0031735E	IPI0031735E	yes	yes	2,3		7.8373E-223	217.86
ITVIDANDNAPAFN(deQSIYR	2121.0491	IPI00129613	IPI00129613	yes	yes	2,3		1.807E-41	192.09
ITTTSPWMIPAPHVWPEDHVFISTPNFN(deYTVQDFER	4272.0415	IPI0013350C	IPI0013350C	yes	yes	4,5,6		0.0001122	56.977
ITTTPTNGQQGTSIEEVHADQSSCTFENINPGIEYN(deVSVYTVK	4827.2821	IPI0011353E	IPI0011353E	yes	no	4,5		8.4839E-06	54.09
ITSCATN(deASMCDEAR	1742.7022	IPI00119063	IPI00119063	yes	yes	2,3		3.5413E-59	219.52
ITPNCCN(deTSTVADAYR	1841.8036	IPI0011122E	IPI0011122E	yes	yes		2	0.0004779	106.93
ITNSPQNQN(deITVPR	1580.8271	IPI00406603	IPI00406603	yes	yes		2	0.00953	71.279
ITN(deQTIGFSFAVEQDIPVK	2106.0997	IPI00624663	IPI00624663	yes	yes	2,3,4		2.5294E-96	237.14
ITN(deSIAMSGVYVCK	1654.8422	IPI00126827	IPI00126827	yes	no		3	0.0003089	127.36
ITIAIN(deNTITPHTIPPGTIVYK	2376.3417	IPI0030923C	IPI0030923C	yes	no	2,3,4		2.8939E-20E	281.07
ITHIPDDIPSNTIVIN(deITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes	3,4		1.6111E-06	98.816



ITHIPDDIPSN(deITVINITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes	3,4	1.6111E-06	98.816
ITGSAGN(deYTVQCQK	1397.6609	IPI00230412	IPI00230412	yes	yes	2,3	0.0032104	93.494
ITEFTHN(deSTMDYK	1585.7083	IPI0013001C	IPI0013001C	yes	no	2,3	0.0024667	119.96
ITDNMFCAGFKVN(deDTK	1859.8546	IPI0011420E	IPI0011420E	yes	yes	2	0.0060355	85.619
ITDIEN(deGTFANIPR	1559.7944	IPI00117957	IPI00117957	yes	yes	3	0.0006973	136.3
ITATDGENFATPIYIN(deITVAASR	2437.2489	IPI00623114	IPI00623114	yes	no	3	8.0026E-32	176.1
ISVPDGIKVSND(deSSAR	1528.8209	IPI00120761	IPI00120761	yes	no	2,3	3.2471E-11	162.37
ISTSPFAINI(deTMIPK	1631.8957	IPI00666034	IPI00666034	yes	no	2,3	2.6739E-07	132.86
ISTNI(deTIVCKPGDIESAPVIR	2282.2304	IPI00308971	IPI00308971	yes	yes	2	3.3111E-47	191.22
ISQN(deASIGPHVRPIPIQYEDKEVEPGTICDVAGWGVVTHAGR	4552.2921	IPI0011694E	IPI0011694E	yes	no	4	1.1192E-07	65.272
ISQN(deASIGPHVRPIPIQYEDK	2361.2441	IPI0011694E	IPI0011694E	yes	no	3	4.3532E-05	95.409
ISQKN(deQTVFER	1348.7099	IPI00130117	IPI00130117	yes	no	2	0.0023895	110.31
ISQAIGN(deITVVQK	1369.7929	IPI00112032	IPI00112032	yes	no	2,3	5.3195E-16	174.95
ISPIHIAIN(deFSIDPK	1663.9297	IPI0011597E	IPI0011597E	yes	yes	3	6.0202E-13	124.51
ISPGGAEMFQVQDMVVSQEKGND(deCSIQR	2994.3998	IPI00130117	IPI00130117	yes	no	3,4	0.0002863	76.049
ISNISN(deISHDIVQEATDHAYNIQQEADEISR	3509.6659	IPI0022344E	IPI0022344E	yes	yes	4	2.4191E-06	80.355
ISN(deVTPEDAGTYCVK	1815.8349	IPI0012915E	IPI0012915E	yes	no	2	0.0001099	127.29
ISN(deITIIIEMEKESAR	1845.987	IPI00356462	IPI00356462	yes	no	2	0.000372	124.43
ISITN(deETFRK	1207.6561	IPI00123652	IPI00123652	yes	no	2	2.5783E-05	131.82
ISITN(deETFR	1079.5611	IPI00123652	IPI00123652	yes	no	2	0.0027068	118.71
ISISEN(deYTISIANAK	1622.8516	IPI0012137E	IPI0012137E	yes	no	2,3	6.0908E-34	194.3
ISIN(deESMQVVS	1361.6973	IPI00471022	IPI00471022	yes	yes	2	0.0084863	75.102
ISHYN(deDTYPISPQR	1786.8638	IPI0011303E	IPI0011303E	yes	no	2,3	7.4518E-12	165.34
ISHYKQN(deFSFCR	1585.746	IPI0038130E	IPI0038130E	yes	yes	2	0.0070188	95.417
ISHDGN(deETIPIHIYVK	1834.9577	IPI00405742	IPI00405742	yes	no	2,3,4	5.3492E-10E	241.8
ISGKPTN(deVSVSVIMSEGDGICY	2312.1028	IPI0096897E	IPI0096897E	yes	no	2	7.214E-25	162.42
ISEN(deGSSVAGIISPMEK	1918.9306	IPI0039979E	IPI0039979E	yes	no	2,3	3.729E-19	164.94
ISEGNRTITI(deINVTRNDTGPYVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no	3,4	1.9337E-06	92.034
ISEGND(deTITIINVTNRNDTGPYVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no	3,4	1.9337E-06	92.034
ISEGND(deTITIINVTNR	1685.9424	IPI0010853E	IPI0010853E	yes	no	2	0.043764	66.059
ISEGND(deRTITIINVTNRNDTGPYVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no	3,4	1.9337E-06	92.034
ISEGND(deRTITIINVTNR	1685.9424	IPI0010853E	IPI0010853E	yes	no	2	0.043764	66.059
ISEEFIKN(deISASAR	1563.8257	IPI0089497C	IPI0089497C	yes	no	2	0.0044681	108.58
ISDTN(deITAIPQGIPTSITEVHIDGNKITKVDAPSIK	3786.0415	IPI0012319E	IPI0012319E	yes	yes	4	0.0039614	51.595
ISDTN(deITAIPQGIPTSITEVHIDGNKITK	3075.6452	IPI0012319E	IPI0012319E	yes	yes	3,4,5	1.2527E-18	115.88
ISDTN(deITAIPQGIPTSITEVHIDGNK	2733.4185	IPI0012319E	IPI0012319E	yes	yes	2,3	2.5524E-29	151.01
ISCAFKTEN(deQTR	1453.6984	IPI0012024E	IPI0012024E	yes	no	2,3	0.0024515	134.56
ISASGAEIEAIEAQVIN(deISIK	2155.1736	IPI00312711	IPI00312711	yes	no	2,3	3.8225E-10E	231.83
ISAIIDNIIN(deHSSIFIKGAR	2068.1429	IPI00123342	IPI00123342	yes	yes	3	0.011918	70.802
ISAIIDNIIN(deHSSIFIK	1783.9832	IPI00123342	IPI00123342	yes	yes	2,3	1.5968E-72	227
IRPINF(deKSFESTVGGSDTYSYIFR	2911.4505	IPI00108844	IPI00108844	yes	yes	3	1.6683E-32	132.65
IRPHFISVCDPDFSQIN(deCSEGYIQNYR	3314.5237	IPI0011562E	IPI0011562E	yes	yes	3,4	6.5978E-42	161.02
IRNPCTSE(deQNCTSPFSYK	2187.9677	IPI00132474	IPI00132474	yes	yes	2,3	4.727E-15	168.08
IRN(deSSIGGVINKYDVVIR	2002.1324	IPI0031467E	IPI0031467E	yes	yes	3,4	0.0002798	114.01
IRN(deSSIGGVINK	1256.7201	IPI0031467E	IPI0031467E	yes	yes	2	3.0062E-10	165.58
IRN(deATITQAITNK	1442.8205	IPI0087602E	IPI0087602E	yes	yes	3	0.012514	80.312
IRIN(deTTSDEKDPTNPF	2003.0072	IPI00131881	IPI00131881	yes	no	3	0.004695	98.943
IRDYEEN(deSSSCHKEVQIIK	2334.1274	IPI00330594	IPI00330594	yes	yes	3	0.0038867	88.992
IRDYEEN(deSSSCHK	1623.6947	IPI00330594	IPI00330594	yes	yes	2,3	0.0089541	94.122
IRDNAIGN(deVSCTIHNEAIGQEK	2438.1972	IPI0012451E	IPI0012451E	yes	no	3	5.4941E-08	105.91
IR(deVNGTKEPIEFK	1529.8566	IPI00345112	IPI00345112	yes	no	2,3	0.023546	96.64
IQVTIYN(deCSFGR	1456.7133	IPI00405742	IPI00405742	yes	no	2	0.001106	122.39
IQTPIIN(deYTEFQKPICIIPSK	2276.1875	IPI00113057	IPI00113057	yes	yes	2,3,4	3.5689E-10	137.61
IQSPIFIIDANANIQN(deVTTSGNK	2457.2864	IPI00666034	IPI00666034	yes	no	3	8.0864E-12	125.45
IQQEPGIIIGPGN(deSTIFIER	2181.1794	IPI00124497	IPI00124497	yes	yes	3	0.000107	91.401
IQNN(deISYQMADIHHIK	1923.9625	IPI00453632	IPI00453632	yes	no	3	0.012026	66.246
IQIEFRPIDIN(deSTAAGIPR	2110.1535	IPI0011551C	IPI0011551C	yes	yes	2,3	4.3056E-08	128.79
IQFDDN(deGTYTCQVK	1687.7512	IPI0011647E	IPI0011647E	yes	no	2	0.0013728	115.82
IQDIEITGSPVSNISAHIFSN(deISSIEK	2898.4975	IPI00119522	IPI00119522	yes	yes	3,4	1.4373E-42	164.79
IQDIEITGSPVSN(deISAHIFSNISSIEK	2898.4975	IPI00119522	IPI00119522	yes	yes	3,4	1.4373E-42	164.79
IQDFVDNETFSGFIQHN(deSIPR	2689.35	IPI00112614	IPI00112614	yes	yes	3,4	1.7807E-19	149.85
IQDFVDN(deETFSGFIQHNISIPR	2689.35	IPI00112614	IPI00112614	yes	yes	3,4	1.7807E-19	149.85
IQCVDGN(deWTTIPVCIEER	2318.0671	IPI0013001C	IPI0013001C	yes	no	2	7.5696E-53	206.7
IPYQGN(deATMIVVIMEK	1805.942	IPI0015325E	IPI0015325E	yes	yes	3	0.0001577	112.5
IPVAVIN(deATAK	1095.6652	IPI00122491	IPI00122491	yes	yes	2	0.010131	77.64
IPSSIENATISIMN(deITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes	3,4	0.0001311	61.499
IPSSIEN(deATSISIMNITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes	3,4	0.0001311	61.499
IPQIIHHYIN(deASDWER	2005.9759	IPI00666034	IPI00666034	yes	no	2,3	0.0007021	102.64
IPPINIGEVIPEANFSPFSIPNCN(deR	3008.543	IPI00322304	IPI00322304	yes	yes	4	0.0001579	76.049
IPNNTQWITW(deSPEGHK	1906.9326	IPI0012581E	IPI0012581E	yes	no	2,3	4.2404E-18	176.4
IPN(deISIDVIQPSFPEIIIESHMVMIR	2990.5973	IPI0022166E	IPI0022166E	yes	no	3,4	0.0008994	65.425
IPFNVMNNVEDIIEQQTFN(deDTVSPR	3032.4913	IPI0031004E	IPI0031004E	yes	yes	3,4	0.0036181	59.814
INTT(deSDEKDPTNPF	2618.2976	IPI00131881	IPI00131881	yes	no	3	0.017971	67.251
INTT(deSDEKDPTNPF	1733.822	IPI00131881	IPI00131881	yes	no	2	0.0039818	95.067
INSAPVEGYSEHVGN(deKTTIR	2171.0971	IPI0034983C	IPI0034983C	yes	no	3,4	5.0158E-06	114.99
INSAPVEGYSEHVGN(deK	1699.8166	IPI0034983C	IPI0034983C	yes	no	2,3	2.2673E-45	205.68
INQINFQNIYQIFN(deETTSQVNK	2655.3293	IPI00356462	IPI00356462	yes	no	3	2.6398E-11	124.63
INNGGCQDICIITHQGHVN(deCSCR	2712.1737	IPI0011906E	IPI0011906E	yes	yes	3	0.0037558	65.149
INN(deITNIGPIDMK	1441.7599	IPI0033068C	IPI0033068C	yes	no	2,3	0.0024919	128.76
INMTIPDAIVPTFSISN(deHSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3	6.4027E-05	100.39
INIDGSN(deYTIK	1349.7191	IPI0011906E	IPI0011906E	yes	yes	2	0.0025462	95.264
INETHIFN(deGSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	1.7488E-60	211.57
INAIN(deITSAIDR	1299.7147	IPI0075038E	IPI0075038E	yes	no	2	0.0032478	86.803
IN(deYTIVGEP	1273.703	IPI00120674	IPI00120674	yes	no	2	0.0004346	118.37
IN(deVTSPDIFR	1160.619	IPI0011691E	IPI0011691E	yes	yes	2	0.011583	83.397
IN(deVTEVYDKIK	1320.7289	IPI00225072	IPI00225072	yes	no	2,3	0.0009413	130.56

IN(deVSYTGERPSSNMVIVDK	2207.1256	IPI00624663	IPI00624663	yes	yes	2,3	2.3472E-12	141.64
IN(deVSHAGAPIGEEYIIVFSR	2171.1375	IPI00785452	IPI00785452	yes	no		3 2.7453E-06	111.77
IN(deMTIPDAIVPTFSISNHSIK	2297.209	IPI00469218	IPI00469218	yes	yes	2,3	6.4027E-05	100.39
IN(deITEEEEKIINRR	1626.9053	IPI00320204	IPI00320204	yes	yes		3 0.046346	76.655
IN(deITEEEEKIINR	1470.8042	IPI00320204	IPI00320204	yes	yes		2 0.0085379	88.087
IN(deITEEEEK	974.49204	IPI00320204	IPI00320204	yes	yes		2 0.030775	81.338
IN(deITAAQISQIEGIIQAR	1938.0898	IPI00115516	IPI00115516	yes	no		3 2.6623E-11	157.11
IN(deISEGEVAATVK	1329.714	IPI00458003	IPI00458003	yes	yes		2 0.0012353	137.46
IN(deGTDPIVAADSKR	1455.7682	IPI00119063	IPI00119063	yes	yes	2,3	0.0033548	107.69
IN(deFTGPGEPDSIR	1401.6888	IPI00320605	IPI00320605	yes	no		2 0.0039484	102.73
IN(deETHIFNGSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	1.7488E-60	211.57
IN(deASIADIQSK	1158.6245	IPI00116913	IPI00116913	yes	no		2 0.0054874	85.554
IMQDPQQAEGIYCN(deR	1934.8979	IPI00314549	IPI00314549	yes	yes	2,3	1.7203E-25	186.56
IMNAPIYIAEWQNITKN(deISEDR	2618.3163	IPI00930882	IPI00930882	yes	no		3 1.1041E-07	107.72
IMNAPIYIAEWQN(deITKNISEDR	2618.3163	IPI00930882	IPI00930882	yes	no		3 1.1041E-07	107.72
IMNAPIYIAEWQN(deITK	1903.9866	IPI00930882	IPI00930882	yes	no		3 2.7311E-12	164.65
IMESHVN(deGTFSK	1417.666	IPI00468055	IPI00468055	yes	no	2,3	0.003403	97.463
IKV(deSNVSCSEASVSK	1506.7712	IPI0013556C	IPI0013556C	yes	no		2 0.0063229	101.2
IKN(deTTNQIAIHK	1355.8136	IPI00985989	IPI00985989	yes	no	2,3	0.0030078	121.02
IKN(deITDISQK	1158.6608	IPI00119299	IPI00119299	yes	no	2,3	8.6587E-09	152.07
IKN(deATVTQYQIK	1405.7929	IPI00221547	IPI00221547	yes	no	2,3	2.1963E-05	150.46
IKIMESH(dePNGTFSK	1658.845	IPI00468055	IPI00468055	yes	no	2,3	0.029411	68.972
IKIDN(deYSTQEIGR	1535.7944	IPI00122257	IPI00122257	yes	no	2,3	1.0476E-31	190.85
IKGMSETISN(deITQR	1576.8243	IPI00649911	IPI00649911	yes	no		3 0.0053899	104.41
IKEQVVGIIAQNN(deCSCSK	2176.0616	IPI00122592	IPI00122592	yes	yes		3 4.7933E-32	185.33
IK(deFIEAGIYEVPIIITDSGNPPKSNISIIR	3296.8384	IPI00323134	IPI00323134	yes	no		4 6.9908E-07	88.168
IYISAEDFSIDHSPN(deSTAGPSCSIHQAFRR	3580.7256	IPI0011553C	IPI0011553C	yes	yes		4 0.053249	39.388
IYISAEDFSIDHSPN(deSTAGPSCSIHQAFR	3424.6245	IPI0011553C	IPI0011553C	yes	yes	3,4	6.4023E-06	77.907
IYGIEN(deTTQEIK	1520.8086	IPI00309999	IPI00309999	no	no		2 0.0025592	122.97
IY(deEGGDIPDFRKENSSYQVINWR	2898.4301	IPI00153316	IPI00153316	yes	yes		3 7.0137E-13	112.56
IITN(deNSQTPHSPQEVVSCSPYAQCGDGGFPYIAGK	3980.9288	IPI00130015	IPI00130015	yes	yes		4 8.5526E-45	136.86
IITHTIEGPSQN(deVTIHIQIPWQDPESWER	3414.7208	IPI0047319C	IPI0047319C	yes	no	3,4	6.3318E-23	126.32
IISQAPSTPSPNMFTINN(deETGDITVAAGIDREK	3599.8141	IPI00323134	IPI00323134	yes	no	3,4	9.9372E-13	93.411
IISQAPSTPSPNMFTINN(deETGDITVAAGIDR	3342.6766	IPI00323134	IPI00323134	yes	no	3,4,5	0.0002313	59.971
IIVVYIHSNN(deITK	1640.925	IPI00123194	IPI00123194	yes	yes	2,3	4.7463E-10	240.46
IITAEHN(deISGAER	1537.7849	IPI00403938	IPI00403938	yes	no	2,3	5.1406E-70	220.85
IQQQSN(deQSSQFIHSVER	2128.0661	IPI00876541	IPI00876541	yes	no		3 5.7025E-05	111.34
IQDFSSDPASN(deITSHSIEKIPSAAPVDHAPR	3528.7485	IPI00170355	IPI00170355	yes	no		4 0.0009637	56.366
IPIHIEKPIQN(deFTICFR	2125.1507	IPI00309214	IPI00309214	yes	yes	2,4	0.0019688	98.943
IIPAFN(deTTSGIPYPR	1645.8828	IPI00127672	IPI00127672	yes	no		3 1.5784E-05	143.94
IINKFN(deSSSSSIEEK	1681.8523	IPI00338561	IPI00338561	yes	yes	2,3	0.0009866	125.97
IINDYVSN(deQTQGMK	1722.8611	IPI00135635	IPI00135635	yes	no		2 0.0008114	103.5
IIN(deTTDVYIIPSNPDGFER	2276.1689	IPI00130573	IPI00130573	yes	yes		2 2.7042E-15	152.06
IIN(deQTIRENIKK	1468.8726	IPI00460063	IPI00460063	yes	no		2 0.01266	106.26
IIN(deQTIRENIK	1340.7776	IPI00460063	IPI00460063	yes	no		2 4.7659E-05	148.28
IIN(deQTIR	856.51305	IPI00460063	IPI00460063	yes	no		2 2.1617E-13	150.84
IIN(deQTADMIQIASK	1544.8232	IPI00126864	IPI00126864	yes	no	2,3	0.0021449	102.29
IIN(deITSPEATAK	1256.6976	IPI00115089	IPI00115089	yes	yes		2 0.001281	116.24
IIN(deITNPVINQEIEAFSPEDASSSR	2890.4349	IPI00221444	IPI00221444	yes	no	3,4	3.6619E-12	110.68
IIN(deITFIDITR	1317.7656	IPI00343568	IPI00343568	yes	no		2 2.3666E-05	147.33
IIN(deHSIIHK	1186.7186	IPI00406603	IPI00406603	yes	yes		2 9.4357E-10	158.05
IIN(deETIYENAK	1306.6769	IPI00153756	IPI00153756	yes	yes		2 0.0026659	96.604
IIN(deASVIGDHTK	1266.6932	IPI00116056	IPI00116056	yes	yes		3 0.010512	72.705
IIMNEGGHYN(deASSGK	1576.7304	IPI01026847	IPI01026847	yes	no		2 0.002443	85.006
IIITAAPN(deITTSPAFRYDIIDVTR	2660.4538	IPI00314726	IPI00314726	yes	yes		3 6.1046E-10	103.85
IIITAAPN(deITTSPAFR	1684.9512	IPI00314726	IPI00314726	yes	yes		3 0.0058962	71.344
IIISPSAFHDGN(deFSIIIR	1999.0891	IPI00310519	IPI00310519	yes	no		3 2.9303E-05	116.43
IIISPEEN(deVTITCTAENQIER	2429.2108	IPI00121378	IPI00121378	yes	no	2,3	3.1837E-48	197.72
IIIPAKN(deTTHIK	1347.8238	IPI00127556	IPI00127556	yes	no		3 0.0089383	86.898
IIIN(deFTSMDIYR	1484.7697	IPI00125182	IPI00125182	yes	no		2 0.0022383	101.89
IIIKAPSHN(deTTEPDPHSISPEIQAIIEVAQHVDVQNGR	4141.1192	IPI00165807	IPI00165807	yes	no		4 0.017627	41.936
IIGGGDEDAIRPQMQUIIDFETAIAN(deITIPQEKR	3779.9516	IPI0039684C	IPI0039684C	yes	no	4,5	0.000705	58.924
IIGGGDEDAIRPQMQUIIDFETAIAN(deITIPQEK	3623.8505	IPI0039684C	IPI0039684C	yes	no	3,4,5	5.5328E-35	138.36
IIFAN(deVSVR	1017.5971	IPI00173158	IPI00173158	yes	no	1,2	0.0018437	121.73
IIYNYN(deSTK	1243.6085	IPI00109946	IPI00109946	yes	no		2 0.0062687	94.465
IIIFDSTN(deASEGAQPPGKPYPPYSIAK	2876.4232	IPI00459432	IPI00459432	yes	yes	3,4	5.3342E-42	162.83
IIDQACGTDN(deQTYASSCHIFATK	2600.1635	IPI00308484	IPI00308484	yes	yes		3 4.4593E-09	108.45
IIDIIPDGYPQISCIPKEEN(deATIATYPEFGVIDIK	3932.0169	IPI00124221	IPI00124221	yes	no		4 2.8241E-06	66.083
IIASPNEENM(deTEIISMR	1946.9441	IPI00322575	IPI00322575	yes	no	2,3	6.9055E-19C	203.2
IIASN(deITETMR	1247.6544	IPI0013260C	IPI0013260C	yes	no		2 0.013213	73.632
IIAN(deISYTIQIDGHR	1712.921	IPI00894972	IPI00894972	yes	no		3 0.000782	104.41
IHYIYQNNFITEIPIESFQN(deATGIR	3093.5924	IPI00122293	IPI00122293	yes	yes	3,4	4.3725E-111	233.56
IHVAQPEN(deDSHVAIHK	1769.9424	IPI00850413	IPI00850413	yes	yes	2,3,4	1.2325E-57	210.14
IHN(deGSEEIAQYK	1458.7103	IPI00380296	IPI00380296	yes	no		3 0.0039946	102.4
IHKDN(deTTCYEFKK	1682.8086	IPI00119063	IPI00119063	yes	yes	2,3	0.038814	78.324
IHKDN(deTTCYEFK	1554.7137	IPI00119063	IPI00119063	yes	yes		2 0.0067778	98.105
IHIIPSMNPDGYEVAQAQGN(deMSGYIVGR	3056.4848	IPI0012826C	IPI0012826C	yes	yes		3 1.3962E-56	184.34
IHIGNYN(deGTAGDAIR	1570.7852	IPI00310797	IPI00310797	yes	yes		2 0.004237	78.505
IH(deRINASIADIQSK	1564.8685	IPI00116913	IPI00116913	yes	no	2,3	0.0036029	128.95
IGYDPYANPPNYGNPDPIVIN(deNTHR	2810.3412	IPI0031643C	IPI0031643C	yes	no	3,4	5.14E-20	136.64
IGVTN(deASIVIFRPGSVR	1785.0261	IPI00652675	IPI00652675	yes	yes	2,3	5.1076E-48	207.92
IGVQMHPGQEIHN(deFTITGR	2134.0742	IPI00119299	IPI00119299	yes	no	2,3,4	4.9125E-08	123.63
IGPGEPIEHCN(deVSGAIPPPGR	2242.178	IPI00321348	IPI00321348	yes	no	3,4	5.4522E-19	149.73
IGNFSEIATHN(deQTFIKK	1947.0214	IPI00855103	IPI00855103	yes	no	2,4	0.013278	69.935
IGNFSEIATHN(deQTFIK	1818.9264	IPI00855103	IPI00855103	yes	no	2,3	2.5982E-35	199.37
IGN(deWTGEWPETEIVANIWMKQPDAAR	3011.46	IPI00322497	IPI00322497	yes	yes		4 0.019127	55.734



IGN(deWTGEWPEIVEIANIWMK	2373.1464	IPI00322497	IPI00322497	yes	yes	2,3,4	1.5404E-53	208.49
IGN(deVTTWISSSNPPVTFAAIYWEEDVSGHK	3401.6568	IPI00225072	IPI00225072	yes	no	3,4	0.001292	52.707
IGN(deFSEIATHNQTFIKK	1947.0214	IPI00855103	IPI00855103	yes	no	2,4	0.013278	69.935
IGN(deFSEIATHNQTFIK	1818.9264	IPI00855103	IPI00855103	yes	no	2,3	2.5982E-35	199.37
IGN(deETIQR	929.49304	IPI00322542	IPI00322542	yes	yes	2	0.010838	111.46
IGIYADVGN(deK	1048.5553	IPI00123814	IPI00123814	yes	no	2	0.012326	81.865
IGISSPTSDFQIEVTPQN(deITINPSSSGSMFSWR	3582.7301	IPI00322867	IPI00322867	yes	no	4	2.4019E-24	118.57
IGISFNSITVMEN(deGSIANVPHIR	2468.2846	IPI00123196	IPI00123196	yes	yes	3	7.2163E-16	172.57
IGHTN(deASIMIFEVK	1558.8177	IPI00858152	IPI00858152	yes	yes	3	0.0012601	129.54
IGDVEVNAGQN(deATFQCIATGR	2220.0593	IPI00123040	IPI00123040	yes	no	3	0.0022295	73.11
IGAINSTISN(deESKEAFIDWAR	2321.1652	IPI00187353	IPI00187353	yes	yes	2,3	1.3351E-15	140.63
IGAINSTISN(deESK	1332.6885	IPI00187353	IPI00187353	yes	yes	2	0.0027233	130.2
IGAINN(deSIIIEDR	1539.8621	IPI00115516	IPI00115516	yes	no	3	0.0013456	125.03
IGAIN(deSTISNESKEAFIDWAR	2321.1652	IPI00187353	IPI00187353	yes	yes	2,3	1.3351E-15	140.63
IGAIN(deSTISNESK	1332.6885	IPI00187353	IPI00187353	yes	yes	2	0.0027233	130.2
IGAGSGPIWIDDIAACNGN(deESAIWDCK	2818.2691	IPI00760106	IPI00760106	yes	no	3	0.0023465	61.612
IFISIN(deVTNSPSSQR	1661.8737	IPI00468674	IPI00468674	yes	no	2	0.010702	84.892
IFIFN(deQTGIEAKK	1507.8399	IPI00378224	IPI00378224	yes	yes	2,3	0.0061644	89.231
IFIFN(deQTGIEAK	1379.7449	IPI00378224	IPI00378224	yes	yes	2	1.5143E-16	178.15
IFFVNP(deAPPYIWPAHKNEIMINSSIMR	3184.6354	IPI00378698	IPI00378698	yes	no	3,4	2.1664E-06	88.036
IETIIN(deGTRK	1371.7722	IPI00119063	IPI00119063	yes	no	3	0.037787	67.385
IETIIN(deGTDR	1243.6772	IPI00119063	IPI00119063	yes	no	2	6.0002E-09	160.52
IEPEHIQIQN(deISQEQIAQVATIATK	2801.4923	IPI00165807	IPI00165807	yes	no	3	6.1204E-68	209.24
IEN(deITGTGTYTIHAQK	1688.8733	IPI00222429	IPI00222429	yes	yes	2,3	2.9921E-17	171.08
IEN(deISSTESGYTATITR	1841.9007	IPI00111960	IPI00111960	yes	no	2,3	8.2013E-17	271.64
IEKIEGIIAN(deVSR	1440.83	IPI00115516	IPI00115516	yes	no	2,3	0.0042565	136.17
IEIVPIIDN(deDSIFVQTDK	2221.1518	IPI00405543	IPI00405543	yes	yes	2,3	8.232E-25	173.28
IEGVTMFAMGIEGAN(deNTQIEDIVSYPSR	3041.4474	IPI00990932	IPI00990932	yes	no	3,4	0.013839	43.895
IEGITN(de)ETZR	1194.5881	IPI00119299	IPI00119299	yes	no	2	0.0011019	114.86
IEGIIAN(de)VSR	1070.6084	IPI00115516	IPI00115516	yes	no	2	0.010971	84.658
IEDRFN(deSTIGPSEEQKNWPGGPR	2799.3212	IPI00115516	IPI00115516	yes	no	3,4	2.7725E-55	195.18
IEDRFN(deSTIGPSEEQK	1977.928	IPI00115516	IPI00115516	yes	no	2,3	4.68E-11	159.81
IEDGFHPDAVAWAN(deITNAIR	2209.0916	IPI00165730	IPI00165730	yes	no	2,3	2.8542E-20	169.61
IECIHVPAN(deR	1207.6132	IPI00111456	IPI00111456	yes	no	2	0.014246	79.974
IEAYSIEGFPAEQN(deASNR	2142.0018	IPI00114319	IPI00114319	yes	yes	2,3	1.1227E-11	240.68
IEAVIPAEFFEVSSSQN(deGSYHHR	2829.4086	IPI00342158	IPI00342158	yes	no	3,4,5	2.0906E-29	157.98
IDWIGN(deCSGINDDSYGYR	2103.8956	IPI00121550	IPI00121550	yes	yes	2,3	2.2198E-48	203.26
IDVSQN(deVSSDQDQSCSTK	2098.8961	IPI00120769	IPI00120769	yes	no	2	7.1658E-07	120.11
IDVNSWIEN(deFTK	1464.7249	IPI00626793	IPI00626793	yes	no	2	0.002481	97.273
IDSFN(deDSTFMIVYTPITPTQR	2546.2363	IPI00322575	IPI00322575	yes	no	2	3.8385E-21	150.91
IDPPCTNTT(deAPSNYINNPYVR	2406.1274	IPI00658539	IPI00658539	yes	no	2,3	1.9398E-09	118.54
IDNYS(deTQEIGR	1294.6153	IPI00122257	IPI00122257	yes	no	2	0.014418	72.705
IDKGGITINAN(deISGDAFIK	1946.0473	IPI00134585	IPI00134585	yes	no	2,3	6.6278E-05	101.96
IDITDFEKN(deSSFAQYQSFK	2267.0746	IPI00121312	IPI00121312	yes	yes	2,3	2.2491E-95	231.83
IDIPVNTSIPN(deVTEIK	1751.9669	IPI00466371	IPI01026704	no	no	2,3	1.0538E-12	168.41
IDIPVN(deTSIPNVTEIK	1751.9669	IPI00466371	IPI01026704	no	no	2,3	1.0538E-12	168.41
IDGSTN(deFTR	1009.4829	IPI00310797	IPI00310797	yes	yes	2	0.010376	98.048
IDGATVDTHHIPVN(deVTIR	1957.0381	IPI00751912	IPI00751912	yes	yes	3	0.0036335	73.296
IDFIVINE(deTR	1218.6608	IPI00125813	IPI00125813	yes	no	2	0.0013893	111.63
IDETDCIGN(deWTWQEGSQQTIK	2508.1227	IPI00122973	IPI00122973	yes	no	2,3	4.3589E-31	175.52
IDCYPDEHGASEAN(deCSAR	2050.8109	IPI00848693	IPI00848693	yes	yes	2,3	5.2648E-09	147.17
IDAYNEAAVSIIN(deSSTR	1822.9061	IPI00380296	IPI00380296	yes	yes	2,3	1.4937E-08	147.06
IDAPTNIQFVN(deETDRTVIVTWTPPR	2882.4927	IPI00113539	IPI00113539	yes	no	3,4	1.9523E-13	111.49
IDAPTNIQFVN(deETDR	1731.8428	IPI00113539	IPI00113539	yes	no	2,3	4.3825E-46	209.66
ICQN(deISKK	989.5328	IPI00126184	IPI00126184	yes	yes	2	7.4537E-05	131.06
ICQN(deISK	861.43784	IPI00126184	IPI00126184	yes	yes	2	0.028066	85.265
ICN(deECSDGSFHISK	1652.6923	IPI00515360	IPI00515360	yes	no	2	0.0022416	93.494
ICHTHGWN(deETSEIMPPGAVFSCIYR	2961.336	IPI00122399	IPI00122399	yes	no	3	0.0090373	55.734
ICEGDRFCIIDVMSTGSSSVGN(deATR	2731.2364	IPI00749655	IPI00749655	yes	no	3	2.4183E-06	90.912
ICDYENHFN(deTSK	1526.646	IPI00757830	IPI00757830	yes	no	2,3	0.0031424	87.667
IAYSNN(deGSDWK	1253.5677	IPI00123996	IPI00123996	yes	yes	2	0.01075	76.927
IAVTN(deTTMTGTVIK	1448.7909	IPI00108041	IPI00108041	yes	yes	2	1.0277E-23	186.05
IAVDWESIGYNI(deTR	1635.8257	IPI00123040	IPI00123040	yes	no	2,3	4.0835E-16	170.66
IATIAN(deFSEIGIEPGR	1686.8941	IPI00129041	IPI00129041	yes	no	3	0.0018703	89.541
IASPPSQGEVPPGPIPEAVIAIYN(deSTR	2759.4494	IPI00114457	IPI00114457	yes	yes	3,5	0.0006896	67.88
IASAVQKN(deATSTK	1317.7252	IPI00400016	IPI00400016	yes	no	2	0.011081	102.28
IAQEGGAAAIAN(deNSVIIPSSR	2264.2488	IPI00121776	IPI00121776	yes	yes	2,3,4	8.9385E-12	124.86
IAPASN(deVSHTVVIRPIK	1801.0574	IPI00467180	IPI00467180	yes	yes	2,3,4	2.2171E-10	239.58
IAPASN(deVSHTVVIR	1462.8256	IPI00467180	IPI00467180	yes	yes	3	0.0013634	112.08
IAN(deFSQSCTIYSGDDIVEAIPKPCPGCPR	3251.505	IPI00114958	IPI00114958	yes	no	3,4	7.0966E-38	156.41
IAN(deETGGHGSGR	1251.5956	IPI00309230	IPI00309230	yes	no	2,3	3.7686E-23	183.96
IAMCQNIGYN(deVTK	1510.7272	IPI00117094	IPI00117094	yes	yes	2	2.436E-06	151.99
IAIYNSRFIN(deICSEMDGRVR	2413.1995	IPI00153749	IPI00153749	yes	yes	3	0.0066687	99.044
IAITPAHIIFIADN(deHTEPAAHFR	2554.3445	IPI00230324	IPI00230324	yes	no	3,4	4.343E-09	108.56
IAISFPN(deITSDGYVVIPTGWSSSDNVNCRPR	3582.7202	IPI00466371	IPI01026704	no	no	3,4,5	3.4647E-16	101.5
IAIN(deITMYIK	1178.6733	IPI00134585	IPI00134585	yes	yes	2	0.0053382	96.113
IACIN(deGTVIR	1115.6121	IPI00134808	IPI00134808	yes	no	2	7.4627E-20	180.07
I(deNHCKFDEFFSQGCAPGYEKNSTICDICIGPIK	3904.7681	IPI00987951	IPI00987951	yes	no	4	5.9604E-11	93.176
I(deAVISGCKNTTSAAMVHCIR	2188.0915	IPI00131216	IPI00131216	yes	yes	2,3,4	1.4623E-05	108.45
HYQVTGYGING(deTGDSNDFWR	2286.009	IPI00221669	IPI00221669	yes	no	2	3.4602E-05	98.443
HYAN(deITNGMYR	1338.6139	IPI00224073	IPI00224073	yes	no	2	0.0015015	116.03
HVVIN(deGSSFGADGFPYVQVIK	2233.1532	IPI00742377	IPI00742377	yes	no	2,3	1.0415E-09	119.8
HVEDKFN(deETTQR	1502.7114	IPI00130654	IPI00130654	yes	no	2,3	7.9247E-16	176.18
HTIEIAPN(deSTAR	1308.6786	IPI00620800	IPI00620800	yes	no	2	0.003136	87.719
HTGPGIISMANAGPNTN(deGSQFFICTAK	2790.3218	IPI00554989	IPI00554989	yes	yes	3	2.6531E-10	98.766
HTDDITSIN(deNTIVNIR	1824.933	IPI00129304	IPI00129304	yes	yes	2,3	2.073E-25	185.95

HSVPVFCPSFYND(deDTDFIGEEIDIVDK	3278.523	IPI0041628E IPI0041628E	yes	yes		4	0.0006676	64.954
HSVIWNAMIHQIN(deMTIK	2132.1023	IPI00111794 IPI00111794	yes	no	2,3		0.0001138	103.6
HSQQPIITYEKYN(deVTDTPK	2261.1328	IPI0032241E IPI0032241E	yes	yes	3,4		6.1321E-19	167.28
HSIEHFNN(deNTDHSHTIR	2318.0941	IPI0011495E IPI0011495E	yes	no	3,4		1.1835E-12	144.97
HPGNFSSISCDYFAVN(deQSR	2184.9647	IPI0011597E IPI0011597E	yes	yes	2,3		3.588E-08	126.07
HPGN(deFSSISCDYFAVNQSR	2184.9647	IPI0011597E IPI0011597E	yes	yes	2,3		3.588E-08	126.07
HNN(deDTQHIWESDSNEFSVIADPR	2710.2008	IPI0012952E IPI0012952E	yes	no	2,3,4		2.0174E-13	200.99
HN(de)ITITQGK	1010.5509	IPI0012835E IPI0012835E	yes	no		2	0.0045495	112.71
HMQN(deITEEQPIEVK	1694.8298	IPI0075674E IPI0075674E	yes	no		2	0.001319	123.76
HIWSIEISNKPN(deISEPEEPK	2346.1856	IPI0013057E IPI0013057E	yes	yes		3	0.0033261	82.007
HIVFWN(deSSNPK	1327.6673	IPI0013075E IPI0013075E	yes	no		2	0.0033679	93.345
HISN(deDTTTPPESTMTVGQAR	2044.9484	IPI0087630E IPI0087630E	yes	yes	2,3		5.6991E-08	122.44
HISFGEDYPGIVNPIDHTN(deVTAPQASMMFQYFVK	3852.828	IPI0062655E IPI0062655E	yes	no	3,4,5		3.2629E-20	110.55
HIN(deITISVAGGFR	1484.81	IPI0085041E IPI0085041E	yes	yes		2	3.8317E-16	171.26
HIN(deASNPSEPATIIIFTAAR	2009.033	IPI00421157 IPI00421157	yes	yes	2,3		1.1941E-11	240.13
HIIEN(deATASVSEAERK	1753.8959	IPI0039684C IPI0039684C	yes	no	2,3		1.3579E-10	239.61
HIIEN(deATASVSEAER	1625.8009	IPI0039684C IPI0039684C	yes	no	2,3		2.3191E-72	228.38
HGQIIKN(deFTIIQGGPPGPR	1972.1007	IPI00129304 IPI00129304	yes	yes		3	1.4738E-08	147.12
HGHFTGFN(deGSTIR	1429.6851	IPI0011798E IPI0011798E	yes	yes	2,3		0.015692	68.809
HGFYCYIIGSTISTFTDAN(deHTCTNEK	3036.3382	IPI0012618E IPI0012618E	yes	yes		3	2.8291E-67	200.29
HFN(deDSGACVPR	1258.5513	IPI00468814 IPI00468814	yes	yes		2	0.010987	76.655
HFKGQTQN(deYSTIIIEASER	2350.1553	IPI0012466E IPI0012466E	yes	no	2,3		3.1601E-13	252.05
HFFN(deVSDEIAIVTIVK	1830.988	IPI00466371 IPI00466371	no	no	2,3		6.5042E-19	179.74
HEN(deNTKDNSIQHEFSITR	2169.0199	IPI00109727 IPI00109727	yes	yes	2,3		6.5714E-07	135.23
HEEGHMINC(deTCFGQGR	1931.7825	IPI0011353E IPI0011353E	yes	no	2,3		0.0013427	94.717
HDYIIIEGAIITN(deTTR	1812.937	IPI00121421 IPI00121421	yes	no		2	0.0001931	118.47
HDVFCGFICTN(deITR	1851.876	IPI0064828E IPI0064828E	yes	no		3	0.0009529	101.53
HDPN(deMTCDYVIK	1491.6486	IPI0011929E IPI0011929E	yes	no		2	0.0021946	102.4
HAN(deWTITPIK	1179.64	IPI0031735E IPI0031735E	yes	yes	2,3		9.6956E-11	160.36
HAIEYFNN(deNTGSHSHIFAIR	2240.0875	IPI0040020E IPI0040020E	yes	no		3	0.0004429	89.866
HAEISFVITDGVVTGN(deDSIEESVHSMR	2976.3924	IPI00621027 IPI00621027	yes	yes		4	0.0001605	75.773
GYPYNGTNYVN(deVTMHIR	1997.9418	IPI0022281E IPI0022281E	yes	yes	2,3		0.0019276	99.044
GYPCCGN(deKTASSVIEITCAK	2111.998	IPI00308971 IPI00308971	yes	yes		3	0.0016636	87.16
GYNSS(deQDIPSIVIDFVK	1880.952	IPI0012466E IPI0012466E	yes	yes	2,3		3.4773E-37	195.77
GYNPVTKN(deVTVR	1346.7306	IPI0013057E IPI0013057E	yes	yes		2	0.0034482	130.1
GYITSFEMFN(deSTFK	1670.765	IPI00262024 IPI00262024	yes	no	2,3		7.5602E-14	264.29
GYIITINFTKN(deTTR	1640.8886	IPI0046921E IPI0046921E	yes	yes	2,3		4.0089E-21	296.22
GYIITIN(deFTKNTR	1640.8886	IPI0046921E IPI0046921E	yes	yes	2,3		4.0089E-21	296.22
GYIITIN(deFTK	1168.6492	IPI0046921E IPI0046921E	yes	yes		2	2.8507E-88	231.42
GWKENPVFDSIFN(deESK	2024.948	IPI0012907C IPI0012907C	yes	no	2,3		6.8917E-20	173.37
GWIN(deGSIVGFYK	1339.6925	IPI0013458E IPI0013458E	yes	no		2	1.4929E-59	194.24
GVEITHNN(deK	1173.5778	IPI0037863E IPI0037863E	yes	no	2,3		6.6253E-12	133.81
GVVSDDIPIN(deVSR	1484.7471	IPI0012952E IPI0012952E	yes	no		2	1.0588E-23	186.05
GVTSSQIFHSPDIAIRDTYVN(deASQSIYGSSPR	3551.7645	IPI00122977 IPI00122977	yes	no		4	0.0009367	56.533
GVTNDIISVQNGTGPSWIN(deKTEK	2457.25	IPI0034468E IPI0034468E	yes	yes	2,3,4		8.8846E-12	186.06
GVTHIN(deISGIKMPR	1521.845	IPI0011906E IPI0011906E	yes	yes		3	0.0035809	125.97
GVTHIN(deISGIK	1137.6506	IPI0011906E IPI0011906E	yes	yes	2,3		6.2281E-16	203.61
GVSSSEN(deFTSPVMEFWERR	2244.027	IPI0046665E IPI0046665E	yes	no		3	1.5129E-10	138.91
GVSSSEN(deFTSPVMEFWER	2087.9259	IPI0046665E IPI0046665E	yes	no	2,3		9.8578E-29	188.04
GVQIIVFPEDGIHGFN(deFTR	2145.1007	IPI0032137E IPI0032137E	yes	no	2,3,4		1.27E-16	160.43
GVNVITVN(deATDADSK	1502.7577	IPI00623114 IPI00623114	yes	no		2	7.2415E-25	185.26
GVN(deVTMPSQPGVPPISSTQIQIDPAIQEFQIVDISRR	4017.0994	IPI0051536C IPI0051536C	yes	no	3,4		2.0776E-08	73.227
GVN(deVTMPSQPGVPPISSTQIQIDPAIQEFQIVDISR	3860.9982	IPI0051536C IPI0051536C	yes	no	3,4,5		1.4546E-19	106.44
GVN(deETIIVNEIK	1327.7347	IPI0033801E IPI0033801E	yes	no		2	0.0012273	128.95
GVIPGEDWTVFQSN(deHSTYEPVIAK	2786.3915	IPI0040418E IPI0040418E	yes	no	2,3,4		0.0001739	77.631
GVIMVGN(deETTYEDGHGARKNITDIVEGAK	3073.5139	IPI0064918E IPI0064918E	yes	no		3	0.042133	55.881
GVIMVGN(deETTYEDGHGARK	2032.9636	IPI0064918E IPI0064918E	yes	no		3	0.05641	54.281
GVIMVGN(deETTYEDGHGAR	1904.8687	IPI0064918E IPI0064918E	yes	no	2,3		1.2115E-10	245.19
GVIDKDPCSVIPSDYDIFIN(deISR	2622.3	IPI0013227E IPI0013227E	yes	yes		3	2.27E-08	104.84
GVFITNE(deTGQPIIGK	1572.8512	IPI0011196C IPI0011196C	yes	no	2,3		2.9172E-14	260.96
GVDSCHGDSGGAFQVFN(deVTVPK	2445.1383	IPI0065367E IPI0065367E	yes	no		3	1.0257E-05	84.946
GVDIDAPYYNYIISFTVPDIDN(deVTVIDYDAR	3535.7035	IPI0011906E IPI0011906E	yes	yes	3,4		1.3323E-34	137.24
GVAVTN(deTSQIGFR	1348.7099	IPI0047108E IPI0047108E	yes	no		2	5.4347E-86	233.59
GV(deIMVGNETTYEDGHGARKNITDIVEGAK	3073.5139	IPI0064918E IPI0064918E	yes	no		3	0.042133	55.881
GTFTDCAIANM(deTQQIR	1825.8451	IPI00621027 IPI00621027	yes	no	2,3		3.2039E-19	279.44
GTEVN(deATVIGESDPIDEVQGFIFGK	2621.2861	IPI00762897 IPI00762897	yes	yes	2,3		1.0968E-16	259.6
GTDPSISPSAATPPAPGAEISYIN(deHTFR	2950.4461	IPI00762091 IPI00762091	yes	yes	3,4		9.4528E-23	124
GTCEQGSPSIVTPPKDIWN(deVTGAK	2454.2213	IPI00652107 IPI00652107	yes	no		3	2.6893E-11	124.31
GTAGNAIMDGASQIVGEN(de)R	1859.8796	IPI0027907E IPI0027907E	yes	yes	2,3		0	308.02
GSYEIAANGEDTDVKITNSPQNQN(deITVPR	3358.6277	IPI0040660E IPI0040660E	yes	yes		3	8.1032E-34	133.27
GSTQYIENIGFN(deMSK	1687.7876	IPI0011610E IPI0011610E	yes	yes	2,3		2.1164E-06	149.86
GSPGN(deASQGSIHHSPIAIQADPR	2537.2735	IPI00114044 IPI00114044	yes	yes	2,3,4		2.5083E-08	100.28
GSPAN(deVTEAR	1000.4938	IPI0080842E IPI0080842E	yes	no		2	0.0097104	94.465
GNNNSGHDN(deHSQFVR	1654.7196	IPI00330594 IPI00330594	yes	yes	2,3		1.5793E-05	144.29
GSNFN(deISKTDNIEECQK	1982.9004	IPI00113057 IPI00113057	yes	yes	2,3		2.8548E-10	248.13
GSNFN(deISK	865.42938	IPI00113057 IPI00113057	yes	yes		2	0.0025563	120.99
GSN(deNSGHDNHSQFVR	1654.7196	IPI00330594 IPI00330594	yes	yes	2,3		1.5793E-05	144.29
GSN(deFTAICVIK	1208.6223	IPI0012015E IPI0012015E	yes	yes		2	2.6444E-07	156.36
GSIQSANDISSQTQGFQHSMDN(deISAQIQTVR	3460.6641	IPI00330594 IPI00330594	yes	yes	3,4		4.6466E-60	175.59
GSIN(deVSYNIGPGFTGSEYSR	2103.9861	IPI0011304E IPI0011304E	yes	no	2,3		5.1911E-25	300.74
GSEVEDEDIEIFN(deTSVQIRPPSTAPGPETAFFIER	3800.8381	IPI00381357 IPI00381357	yes	no	3,4		6.9911E-73	178.95
GSAIPHPNSN(deATWEIK	1606.8104	IPI0011929E IPI0011929E	yes	no	2,3		2.0579E-05	141.85
GRADECAIPYIGATCYCIDFCN(deR	2781.1768	IPI0011545E IPI0011545E	yes	no		3	3.2366E-11	122.94
GQTQNYST(deIIIEASER	1937.933	IPI0012466E IPI0012466E	yes	no	2,3		7.1316E-48	202.16
GQTGIGFIYASGIVN(deSSQAK	2054.0433	IPI0013114E IPI0013114E	yes	no	2,3		4.459E-48	196.78
GQQQVIPIPIVPIVIVSIVGSASN(deTSR	2741.544	IPI00162831 IPI00162831	yes	yes	3,4		1.7298E-18	115.36

GQNQPVIN(deITNR	1352.7161	IPI0011190E	IPI0011190E	yes	no		2	0.0010771	139.48
GQAQSDAAGIPGAESRN(deDSIPGAGSEADGIEGK	3111.4341	IPI00317487	IPI00317487	yes	yes	3,4		1.6384E-34	133.61
GPPGVN(deGTQGFQGCPCGQR	1812.8326	IPI0083074E	IPI0083074E	yes	yes	2,3		5.7206E-15	162.46
GPNKIQC(deVDGNWTTIPVCIEEER	2714.2792	IPI0013001C	IPI0013001C	yes	no		3	4.0254E-09	111.49
GPN(deFTSPASITFTTGKPPQDIEAK	2616.3435	IPI0045841E	IPI0045841E	yes	no		3	6.9277E-08	100.28
GPMNQCIVATGIDVIGN(deR	1913.9452	IPI0011847E	IPI0011847E	yes	yes		3	3.2022E-06	121.82
GPGIKPN(deQTSK	1125.6142	IPI0022142E	IPI0022142E	yes	yes		2	1.0052E-16	179.19
GPFDSFVVQYQDTEN(deETQAIIVDGDQDKVIISGIEPK	4094.0008	IPI0045841E	IPI0045841E	yes	no	4,5		7.1994E-08	71.623
GPECSQNY(deTAPTGVIK	1720.809	IPI0012399E	IPI0012399E	yes	yes		2	9.4561E-26	188.27
GPDISN(deCTSHWVNQIAQK	2053.964	IPI0087655E	IPI0087655E	yes	no		3	3.8392E-28	182.02
GPCSHICIINYN(deR	1602.7395	IPI0011906E	IPI0011906E	yes	yes	2,3		0.0030016	109.44
GNYGWQAGN(deHSAFWGMTIDEGR	2566.1448	IPI0011545E	IPI0011545E	yes	no	2,3		2.2862E-39	185.61
GN(deTTAIDKEIAR	1287.6783	IPI0010853E	IPI0010853E	no	no	2,3		2.3472E-06	155.48
GN(deTTAIDK	818.4134	IPI0010853E	IPI0010853E	no	no		2	0.049839	70.056
GN(deSTIAVPK	885.49198	IPI0080829E	IPI0080829E	yes	no		2	9.1054E-17	162.36
GN(deSSIVPVVSPSIQQIVIEK	2157.1681	IPI0098598E	IPI0098598E	yes	no	2,3		2.2593E-11	245.66
GN(deQSSQWIYEAMAK	1611.7351	IPI0013779E	IPI0013779E	yes	yes		2	5.1167E-05	148.03
GN(deMTWYAAGK	1097.4964	IPI0012095E	IPI0012095E	yes	yes		2	0.0002008	127.42
GN(deITIER	801.43447	IPI0027901C	IPI0027901C	yes	no		2	0.0045245	120.46
GN(deITEYQCHQYITK	1753.8094	IPI0012239E	IPI0012239E	yes	no	2,3		6.3374E-56	212.39
GN(deISTEKFVEEIK	1492.7773	IPI00466371	IPI01026704	no	no		2	0.008835	88.021
GN(deHSIFGIEVATIGQGPDPCSVNER	2653.2555	IPI0045943E	IPI0045943E	yes	yes		3	6.8895E-111	236.38
GN(deGSCVCHAGWQGIR	1657.7202	IPI0098726E	IPI0098726E	yes	no		2	0.000487	120.66
GMVIDENSNN(deITGAVISVTGINHDVTSGEHGDYFR	3717.7329	IPI0012826C	IPI0012826C	yes	yes		4	4.1096E-19	102.57
GMSETISNIT(deQR	1335.6453	IPI00649911	IPI00649911	yes	no		2	0.0014164	111.79
GMNYN(deSSVVK	1097.5175	IPI0041628E	IPI0041628E	yes	yes		2	4.1388E-07	141.08
GKSN(deQTECFNFIR	1599.7464	IPI0089086E	IPI0089086E	yes	yes		2	0.0096446	83.087
GKNN(deQTECFNHVR	1602.7321	IPI0012466E	IPI0012466E	yes	no	2,3		0.0041205	136.7
GKIYWDGDNISMANMDG(deSNHTIIFSGQK	3199.4703	IPI0011906E	IPI0011906E	yes	yes		4	8.8661E-07	87.511
GKIYWDGDN(deISMANMDGSNHTIIFSGQK	3199.4703	IPI0011906E	IPI0011906E	yes	yes		4	8.8661E-07	87.511
GIYHIN(deITVGGIPFK	1627.9086	IPI0011553E	IPI0011553E	yes	yes		3	0.0067009	72.496
GIWKIPFSPENTREEDFYVN(deETSTVK	3085.5033	IPI0011610E	IPI0011610E	yes	yes	3,4		3.7633E-10	101.6
GIVSGGVYNHSHVGCIPYTIPPEHHVN(deGSRPPCTGEGDTPR	4430.0379	IPI00113517	IPI00113517	yes	yes	4,5		7.4643E-05	56.288
GIVMNYPHITN(deITTIGQSVEYR	2505.2686	IPI0013057E	IPI0013057E	yes	yes		3	1.7704E-39	188.96
GISYQIIGN(deHSK	1315.6884	IPI00623114	IPI00623114	yes	no	2,3		0.0011066	128.54
GISPGN(deYSVR	1048.5302	IPI0012835E	IPI0012835E	yes	no		2	0.0047069	97.813
GIPDQKVN(deFTCK	1405.7024	IPI0012915E	IPI0012915E	yes	no		2	0.0072347	93.011
GINIT(deEDTYKPR	1405.7201	IPI0011980E	IPI0011980E	yes	yes	2,3		2.8061E-69	223.31
GINCN(deISR	932.4498	IPI0013656E	IPI0013656E	yes	no		2	0.0020797	122.52
GIMVGN(deGSVIGVVQAVDAETGK	2100.0885	IPI0034215E	IPI0034215E	yes	no	2,3		6.5019E-14	250.05
GIMIIIN(deDTQHFSNNVKEIGQFYR	2893.4545	IPI00312711	IPI00312711	yes	no		3	1.0531E-14	120.71
GIMIIIN(deDTQHFSNNVK	1942.9935	IPI00312711	IPI00312711	yes	no	2,3		2.1892E-27	184.02
GIIN(deATISVAEINHPVTTYK	2140.1528	IPI0013057E	IPI0013057E	yes	yes	2,3		3.887E-114	242.98
GIIGISN(deATIWYWHIPDTAYPGIYR	2690.3857	IPI00458077	IPI00458077	yes	yes		3	5.7732E-08	99.86
GIIGHNN(deKSSASFR	1486.7641	IPI0016287C	IPI0016287C	yes	yes	2,3		0.006242	96.464
GIIGHNN(deK	851.46135	IPI0016287C	IPI0016287C	yes	yes		2	0.0043223	119.21
GIFPDGSHEISGN(deTSITPDK	2070.9858	IPI00894972	IPI00894972	yes	no		3	4.1683E-06	109.87
GIDWYMEFFPIPSN(deTTSDFYFEK	2833.2622	IPI0040418E	IPI0040418E	yes	yes		3	0.012975	56.304
GIAN(deISNFIR	1103.6087	IPI0012915E	IPI0012915E	yes	no		2	1.0169E-25	183.03
GIAEVTEN(deVTEGGVTK	1602.8101	IPI00130271	IPI00130271	yes	no		2	1.0126E-88	237.46
GHVDPAN(deDTFDIDPR	1667.754	IPI00453501	IPI00453501	yes	no		2	0.0014288	95.236
GHTDRCDEAQAIQVWN(deDTHPEVISQKPFDK	3520.643	IPI0010800E	IPI0010800E	yes	no		4	0.0006927	62.605
GHIIAQVATNPQGITGTGN(deTTSEMDPSHRK	3230.6102	IPI0032137E	IPI0032137E	yes	no		4	0.012604	47.225
GHIIAQVATNPQGITGTGN(deTTSEMDPSHR	3102.5153	IPI0032137E	IPI0032137E	yes	no	3,4		4.472E-67	182.19
GHICN(deQTQNIQSSK	1613.758	IPI0098788E	IPI0098788E	yes	yes	2,3		0.001371	115.12
GHFYYN(deISDVR	1369.6415	IPI0013556C	IPI0013556C	yes	no	2,3		0.0009257	109.6
GHAIGISCQSEN(deGTAPITYHIMK	2484.189	IPI00406901	IPI00406901	yes	no	3,4		1.8335E-49	199.41
GHAHIAIVNHDSYN(deFSHR	2145.0253	IPI0013336E	IPI0013336E	yes	no	3,4		3.1444E-10	132.84
GGTVEYTN(deEKHTIEIAPNSTAR	2387.1717	IPI0062080C	IPI0062080C	yes	no		3	0.016083	63.447
GGITINANISG(deDAFIK	1589.8413	IPI0013458E	IPI0013458E	yes	no		2	0.0094219	88.133
GGIN(deITAVTVTAENDHTVAFIGTSDGR	2715.3464	IPI00405742	IPI00405742	yes	no		3	3.5819E-22	123.36
GGGGPWAN(deGSAIAICQR	1670.7947	IPI00453501	IPI00453501	yes	no		2	0.003925	73.498
GFQWVTGDN(deHTSYSR	1753.7808	IPI0012942E	IPI0012942E	yes	yes		2	8.3888E-25	184.48
GFPQIIGAAGN(deVSAGSVIIR	1926.0687	IPI0075485E	IPI0075485E	yes	no		3	7.1797E-13	143.28
GFN(deATYHVR	1063.5199	IPI0041102E	IPI0041102E	yes	yes	2,3		0.0030181	117.7
GFN(deASYIR	926.46102	IPI0046196E	IPI0046196E	yes	yes		2	0.015895	95.099
GFGVAFVGN(deYTGSIPNEAAINTVR	2453.2339	IPI00165807	IPI00165807	yes	no		3	8.8995E-06	99.409
GFDTYFGYIIGSEDYTHEACAPIESIN(deGTR	3545.5722	IPI0065235E	IPI0065235E	yes	no		3	1.1125E-39	141.36
GETASIICN(deISVR	1418.7188	IPI0032134E	IPI0032134E	yes	no		2	5.128E-23	181.71
GENPSQYGITAFNHPIN(deITK	2200.0913	IPI00112614	IPI00112614	yes	yes		3	3.1387E-08	121.26
GEIQSEN(deSSITISSNR	1807.8548	IPI00466371	IPI01026704	no	no	2,3		2.7028E-91	235.75
GEIN(deSTIFSSRPK	1434.7467	IPI0046006E	IPI0046006E	yes	no	2,3		5.7899E-32	194.98
GEIN(deSTIFSSR	1209.599	IPI0046006E	IPI0046006E	yes	no		2	0.01639	71.241
GECYYTN(deGTQR	1347.5514	IPI0011091C	IPI0011091C	yes	no		2	4.0506E-33	197.07
GDTHTQIIEGIQFN(deITQTSEADIHK	2795.3726	IPI0040630E	IPI0040630E	no	no	3,4		7.3685E-12	193.42
GDSGGAIVFIDN(deETQR	1677.7958	IPI0046706E	IPI0046706E	yes	no		2	1.6982E-25	186.72
GDRN(deITWR	1016.5152	IPI0022142E	IPI0022142E	yes	yes	2,3		0.0033912	126.07
GDN(deQSPIEHTK	1337.6575	IPI0022189C	IPI0022189C	yes	yes	2,3		0.0013258	136.93
GDHHQISHYN(deITGVR	1732.8394	IPI0033820E	IPI0033820E	yes	no	2,3		0.0003931	112.96
GDHGAN(deFSCR	1119.4516	IPI0012297E	IPI0012297E	yes	no		2	5.9184E-06	136.96
GDGPFTVFPVPHADIISN(deMSQDEIAR	2715.2963	IPI0098726E	IPI0098726E	yes	no		3	1.6193E-29	158.52
GDEKEN(deITAEIDISIK	1844.9367	IPI0012472E	IPI0012472E	yes	no	2,3		0	200.67
GDDIYTNV(deTVSIVEAIVGFEMDITHIDGHK	3287.602	IPI00320241	IPI00320241	yes	yes		4	1.3212E-53	165.13
GCKDNA(deTDSVPIR	1431.6776	IPI0011906E	IPI0011906E	yes	yes	2,3		1.2718E-42	202.29
GCHVN(deECISR	1230.5234	IPI0011906E	IPI0011906E	yes	yes		2	0.0022305	106.29
GCADYCNQ(deTITKR	1585.6977	IPI0098726E	IPI0098726E	yes	no		2	0.018287	73.386

GAYPVFFN(deFTR	1317.6506	IPI0030832E	IPI0030832E	yes	yes		2	0.0074186	88.441
GATISHHNIVN(deNSMIIGQR	2061.0538	IPI0012263C	IPI0012263C	yes	yes	2,3		5.4705E-06	117.26
GAIQIPTVSFSHEESN(deTTAIAEFGEYIRK	3194.5884	IPI0022407C	IPI0022407C	yes	yes	3,4		0.0006118	66.017
GAIQIPTVSFSHEESN(deTTAIAEFGEYIR	3066.4934	IPI0022407C	IPI0022407C	yes	yes		3	5.3721E-23	129.23
GAIDIMIQVN(deMTPGHSSAPPK	2163.0816	IPI0022407C	IPI0022407C	yes	yes	2,3,4		2.8404E-25	162.77
GAGEVSPAESHSSKPTN(deISAK	1965.9756	IPI0023071E	IPI0023071E	yes	no	2,3		1.7055E-41	194.27
GAFVSKNPCN(deITREDYAPIVK	2378.2053	IPI0030796E	IPI0030796E	yes	yes		3	1.5229E-37	180.78
GAFVSKNPCN(deITR	1462.7351	IPI0030796E	IPI0030796E	yes	yes	2,3		0.0041199	136.38
GAFISN(deFTMTVNGMTFTSSIK	2253.081	IPI0097043E	IPI0097043E	yes	no	2,3		3.3539E-26	169.51
GAFFPIKEDN(deWSIPNR	1889.9424	IPI0013556C	IPI0013556C	yes	no	2,3		0.0002452	129.38
GAAAPSAPHWN(deETAEEK	1635.7641	IPI0064828E	IPI0064828E	yes	no		3	0.0044743	74.789
FYPEDIQIIWIENGNVSRNDTPKN(deITK	3203.6251	IPI0012915E	IPI0012915E	yes	no	3,4		2.2042E-16	119.79
FYPEDIQIIWIENGNVSRN(deDTPKNITK	3203.6251	IPI0012915E	IPI0012915E	yes	no	3,4		2.2042E-16	119.79
FYPEDIQIIWIENGN(deVSRNDTPKNITK	3203.6251	IPI0012915E	IPI0012915E	yes	no	3,4		2.2042E-16	119.79
FYPEDIQIIWIENGN(deVSR	2192.0902	IPI0012915E	IPI0012915E	yes	no	2,3		0.0029295	78.234
FYFGSPISPQYAN(deFTGCISNAYFTR	2964.3541	IPI0022344E	IPI0022344E	yes	yes		3	0.0007571	69.27
FVPNSNMN(deFTGQAYSGR	1888.8526	IPI0010853E	IPI0010853E	no	no	2,3		0	235.71
FVN(deSTGYITEAEK	1457.7038	IPI00153187	IPI00153187	yes	yes		3	0.0092215	73.466
FVFMEEGSN(deKTVEPR	1768.8454	IPI00133074	IPI00133074	yes	yes	2,3		0.0044346	92.265
FVFMEEGSN(deK	1186.5329	IPI00133074	IPI00133074	yes	yes		2	0.016505	77.379
FTQDAYSAVVKEN(deSTEAR	2014.9596	IPI00623114	IPI00623114	yes	no		2	1.3984E-11	159.95
FTFSTHTPGEHQICIHNSN(deSTK	2428.123	IPI0047368C	IPI0047368C	yes	no	2,3,4		9.2099E-25E	222.3
FTFSTHTPGDHDQICIHNSN(deSTR	2442.1135	IPI0015346E	IPI0015346E	yes	no	2,3,4		3.2512E-48	197.67
FTCN(deQTTDVIIIHSK	1775.8876	IPI0031950E	IPI0031950E	yes	yes	2,3		1.2483E-87	231.06
FTAPDTIFAN(deGSVYPPNEGFCPCR	2716.205	IPI01008227	IPI01008227	yes	no	2,3,4		6.5147E-33	161.66
FSVN(deQTTIITHEK	1516.7886	IPI0084869C	IPI0084869C	yes	yes	2,3		8.0167E-07	157.86
FSPPVVN(deVTWIR	1413.7769	IPI0011080E	IPI0011080E	yes	no		3	0.0005311	137.89
FMSDITYDIQDVIADVGIKDIFTN(deQSDFADTTK	3699.7138	IPI0011610E	IPI0011610E	yes	no	3,4		3.6283E-60	176.7
FSHN(deGTCAAEGK	1277.5459	IPI0032067E	IPI0032067E	yes	yes		2	0.00156	110.38
FSGAN(deDTDFR	1128.4836	IPI0022166E	IPI0022166E	yes	no		2	1.2376E-05	132.32
FSEIIVNN(deATEEIIVK	1817.9775	IPI0032119C	IPI0032119C	yes	no		2	1.0236E-34	197.15
FSATEVPEKGAGEVSP(deAEHSSKPTNISAK	2954.4621	IPI0023071E	IPI0023071E	yes	no	3,4		7.7413E-56	186.96
FS(deAIIGHYNRGNISTEK	2019.0538	IPI00466371	IPI01026704	no	no		3	0.02928	65.374
FQSAAGAIQEASEAYIVGIFEDTN(deICAIHAK	3436.6973	IPI0098957E	IPI0098957E	yes	no		3	5.3679E-40	143.27
FQISPQIQFSPEEVIGMVIN(deYSR	2681.3523	IPI0012334E	IPI0012334E	yes	no		3	0	244.91
FQIIN(deFSSSEIK	1411.7347	IPI0085672C	IPI0085672C	yes	no		2	0.0007018	136.3
FPVPFQKENV(deTATIVEIGR	2144.163	IPI00134691	IPI00134691	yes	yes		3	2.2666E-08	129.88
FNSTE(deYQVVTR	1342.6517	IPI0011906C	IPI0011906C	yes	no	2,3		7.9994E-17	177.81
FN(deVSIIYGR	1067.5764	IPI0032067E	IPI0032067E	yes	yes		2	0.012994	94.297
FN(deTTSINVGSSSYFPEHGYFR	2322.0705	IPI00263041	IPI00263041	yes	no		3	3.6248E-05	98.227
FN(deITETPEADIHQGFNGIISQPEDQDQINIGNAMFIEK	4601.202	IPI0013183C	IPI0013183C	yes	no	4,5,6		4.8552E-08	63.625
FN(deETRDITISVSDINVR	2079.0596	IPI0099093E	IPI0099093E	yes	yes		3	1.0761E-06	131.4
FMISGYN(deFSVMENMPAISVGMVTVIDGDKGENAR	3775.7718	IPI00719927	IPI00719927	yes	no		4	0.0005572	51.871
FMGIPTKDDNIEHYKN(deSTVMAR	2566.2308	IPI0012392E	IPI0012392E	yes	no		3	0.0013455	84.493
FMFFVQFPHN(deATQTMNIR	2228.0659	IPI0013651C	IPI0013651C	yes	yes		3	0.0020616	76.151
FITDVERN(deETAIYHVEAFK	2281.1379	IPI0046673C	IPI0046673C	yes	no	2,3		3.0276E-41	195.23
FIRPFMQYN(deSTR	1558.7715	IPI0013628C	IPI0013628C	yes	yes		3	0.0034008	116.55
FIQSAEFFN(deYTVR	1620.7936	IPI0012740E	IPI0012740E	yes	yes	2,3		5.8655E-16	174.39
FINYN(deQTVSR	1240.62	IPI0022693E	IPI0022693E	yes	no		2	0.0004849	122.69
FINHTVGN(deKTK	1257.683	IPI0011122E	IPI0011122E	yes	yes		2	0.012404	89.805
FINHTVGN(deK	1028.5403	IPI0011122E	IPI0011122E	yes	yes		2	0.026397	78.934
FINFFVGNTIN(deSSYPPGYSIHSISVR	2915.4606	IPI0013042C	IPI0013042C	yes	no		3	5.837E-17	128.38
FIN(deISSTGIR	1106.6084	IPI0013189E	IPI0013189E	yes	yes		2	0.0069252	93.058
FIN(deHTVGNKTK	1257.683	IPI0011122E	IPI0011122E	yes	yes		2	0.012404	89.805
FIN(deHTVGNK	1028.5403	IPI0011122E	IPI0011122E	yes	yes		2	0.026397	78.934
FIIKGPN(deKIQCVDGNWTTIPVCIEEER	3215.6107	IPI0013001C	IPI0013001C	yes	no		3	0.0068213	64.589
FIFKN(deQTIEIHVIYGPR	2074.1364	IPI0012297C	IPI0012297C	yes	no	2,3,4		1.528E-47	203.9
FIEYVTSECHFYN(deGTQHVR	2386.0801	IPI0047458C	IPI0047458C	yes	no	2,3,4		3.3585E-06	115.8
FIEPYN(deDSIQAQK	1551.7569	IPI00123704	IPI00123704	yes	yes		2	0.0025167	121.04
FIASFNVVN(deTTKR	1495.8147	IPI0062257E	IPI0062257E	yes	no	2,3		0.0026803	136.93
FI(deEAGIYEVPIITDSGNPPKSNISIR	3055.6594	IPI00323134	IPI00323134	yes	no	3,4		1.2868E-42	167.59
FHVN(deYTQPIVAVK	1514.8245	IPI00123704	IPI00123704	yes	no	2,3		0.0025808	118.24
FHVHQPVTQPFIVQVTN(deTTVK	2320.2328	IPI00658311	IPI00658311	yes	no	2,3,4		1.5484E-85	199.01
FGYIIHTDN(deR	1234.6095	IPI0047520E	IPI0047520E	yes	no		2	0.000687	119.53
FGTCSQICN(deNTK	1428.6126	IPI0011906C	IPI0011906C	yes	yes	2,3		1.6069E-23	186.16
FGN(deETFIIHIDNGR	1631.8056	IPI0017035E	IPI0017035E	yes	yes	2,3		9.7405E-07	153.39
FGHSPIIN(deITGGISHASDVVIYHQK	2826.4565	IPI0011906C	IPI0011906C	yes	yes	3,4,5		3.7752E-20	131.56
FGEFGN(deYSIIVQHASSGANK	2125.0229	IPI0031748E	IPI0031748E	yes	no	2,3		3.3571E-66	218.25
FFPYAN(deGTISIR	1384.7139	IPI0011576E	IPI0011576E	yes	no		2	0.0035691	84.169
FFN(deDSIVDPVDSEWFGFYR	2339.0535	IPI0033131E	IPI0033131E	yes	no	2,3		1.8978E-25	178.72
FDEVYDAIAGAHPN(deITVYK	2122.0371	IPI0011116C	IPI0011116C	yes	no		2	4.3244E-15	154.19
FDAAGTSVHGGVPQN(deGSICAHIPMIK	2663.2948	IPI0031553E	IPI0031553E	yes	yes	3,4		3.7546E-20	131.33
FCNIVPTEHCFIGN(deGTEYR	2313.0307	IPI00227857	IPI00227857	yes	yes		3	2.2706E-10	135.09
FAVESIVPSSISIMHSPPDAQN(deMSEVSISPMEISTFR	4019.9319	IPI00114044	IPI00114044	yes	yes	3,4,5		4.3897E-15	98.76
FAQPQWHIHINGTFSN(deETEPDTEPCVDGWVYDR	4057.833	IPI0022634E	IPI0022634E	yes	no		4	7.5106E-05	60.029
FAQPQWHIHINGTFSN(deGTFSNETEPDTEPCVDGWVYDR	4057.833	IPI0022634E	IPI0022634E	yes	no		4	7.5106E-05	60.029
FAPPEAPEPWSG(deVRDGTSPQAICPQNVTMNMEGIK	3810.7804	IPI00320204	IPI00320204	yes	yes		4	0.0003845	54.732
FANEYPN(deITR	1223.5935	IPI0013057C	IPI0013057C	yes	yes		2	0.0006997	119.39
FAIKDYR(dePSAGNNSIYQDTVVFK	2745.4126	IPI0032246C	IPI0032246C	yes	no		3	8.6085E-05	83.063
FAEIN(deGSAICSYNIKPSYTTITSK	2692.3054	IPI00421237	IPI00421237	yes	no		3	9.6131E-06	89.483
F(deDEFFSQGCAPGYEKNSTICIGPIK	3252.4566	IPI00987951	IPI00987951	yes	no	3,4		3.1145E-48	175.28
F(deAPPQPAEPWSSVKNATTYPPMCSQDAAR	3203.4805	IPI0012839E	IPI0012839E	yes	yes		3	7.9084E-10	92.886
F(deAPPQPAEPWSFVKNATSYPPMCSQDAGWAK	3464.5958	IPI0013834E	IPI0013834E	yes	yes		4	0.0072712	50.857
EYEGAVYPDN(deTTDFQR	1903.8224	IPI00605187	IPI00605187	yes	no	2,3		1.2439E-27	190.19
EWN(deGTYHCIFR	1481.651	IPI00876541	IPI00876541	yes	no	2,3		0.0032615	93.839
EWIPIN(deHSVNSVVVR	1747.937	IPI0022475E	IPI0022475E	yes	yes	2,3		3.4783E-05	140.27

EVTVIGVATAPTQVISNGIPVSN(deFTYSPDNK	3217.6507	IPI0011196C	IPI0011196C	yes	yes	3,4,5	0.0005205	58.812
EVNVYMYIANGSAFN(deISNK	2133.0201	IPI00222967	IPI00222967	yes	no	2,3	7.5049E-32	182.49
EVNVYMYIAN(deGSAFNISNK	2133.0201	IPI00222967	IPI00222967	yes	no	2,3	7.5049E-32	182.49
EVNSQIDNNGCSTQEVN(deITEIQSKK	2834.3352	IPI0012322C	IPI0012322C	yes	yes	3	0.037878	62.099
EVNSQIDNNGCSTQEVN(deITEIQSK	2706.2403	IPI0012322C	IPI0012322C	yes	yes	2,3,4	7.5524E-56	195.15
EVN(deKTCEAIIFK	1450.749	IPI0011511E	IPI0011511E	yes	yes	2,3	0.0003315	145.17
EVMN(deFTAENIYK	1457.6861	IPI0017000E	IPI0017000E	yes	no	2	0.0025862	91.62
EVHFFVN(deASDVDSVK	1691.8155	IPI0031004E	IPI0031004E	yes	yes	2,3	6.1402E-05	138.91
ETYIETN(de)YTIK	1373.6715	IPI0012015E	IPI0012015E	yes	yes	2	0.0052592	86.344
ETYFN(de)SKK	1128.5815	IPI0015325E	IPI0015325E	yes	no	2,3	1.295E-08	147.95
ETVITFIDPEGSQVDTIEGNN(deITGIASFDFEIPSNPK	4090.9899	IPI0040554C	IPI0040554C	yes	yes	4	4.4703E-40	128.22
ETIIEHDQRQEEYEIISFADTDISSIN(deQTR	3579.6965	IPI0013651C	IPI0013651C	yes	yes	3	1.3981E-33	131.04
ETFIIN(deTTCVK	1324.6697	IPI0013819E	IPI0013819E	yes	yes	2	0.0003352	129.34
ESYIISN(deSTMK	1384.6908	IPI0012392E	IPI0012392E	yes	no	2	0.002146	102.97
ESSEHPWK(deWTDNTEYNNTIPIRGEER	3187.4595	IPI0027643C	IPI0027643C	yes	yes	3,4	2.2656E-10	105.46
ESQTIGDQCVYN(deSTHIGFQR	2339.0601	IPI0011813C	IPI0011813C	yes	yes	2,3	5.48E-156	268.25
ESQIN(deITVMAKPTNWIEGTR	2287.1631	IPI0031140E	IPI0031140E	yes	yes	2,3	2.6818E-05	103.4
ESQIN(deITVMAK	1232.6435	IPI0031140E	IPI0031140E	yes	yes	2	0.001157	106.49
ESNPITAQQT(deKIDAPTNIQFVNETDR	3030.4894	IPI0011353E	IPI0011353E	yes	no	3	5.1228E-06	86.08
ESIIPVTIQCND(deITSSHTIMYSYWTR	3086.4841	IPI00757771	IPI00757771	yes	no	3	0.0016789	63.165
ESGIQN(deVSTCR	1249.5721	IPI01008227	IPI01008227	yes	no	2	0.0010656	107.97
ESGIN(deMTIPEENQPVFNHIYNIK	2785.3745	IPI0040393E	IPI0040393E	yes	no	3	4.8026E-33	163.79
ERVEN(deTSQPGEMQVTIQNIMPATVYIFK	3222.6053	IPI0012915E	IPI0012915E	yes	no	3	2.3178E-37	151.18
ERTEVIIQGTVS(dePNASAPDAVWEDYEYFK	3150.5146	IPI00405437	IPI00405437	yes	no	3	1.7629E-13	106.11
ERSN(deNTPDANVAPEVTVISR	2168.0822	IPI0011080E	IPI0011080E	yes	no	3	0.0009494	89.374
EREDVQAIN(deISVPYGPPIEDFQR	2671.3242	IPI01023131	IPI01023131	yes	no	3	4.0418E-09	111.45
EQYIHEN(deYSR	1337.6	IPI0012740E	IPI0012740E	yes	no	2,3	0.0025621	104.24
EQSFQGSN(deMTIFYR	1706.7723	IPI00453571	IPI00453571	yes	no	2	3.2884E-41	149.22
EQN(deYTCHVYHEGIEPEPITIR	2455.159	IPI00608044	IPI00608044	yes	no	2,3,4	7.3712E-80	221.47
EQN(deYTCHVNHEGIEPEPITIR	2406.1386	IPI0031298C	IPI0031298C	yes	no	3	0.0046615	69.422
EQN(de)YTCR	969.39743	IPI0010999E	IPI0010999E	yes	no	2	0.0075334	107.57
EQN(de)YTCHVHHK	1451.6364	IPI00850057	IPI00850057	yes	no	2,3	4.1449E-07	153.95
EIQGIN(deASSAAWAR	1600.7958	IPI0011691C	IPI0011691C	yes	no	2	0.000385	112.3
EQIN(de)SIDHR	1223.6258	IPI00127407	IPI00127407	yes	no	2,3	0.0059755	95.094
EQETCIAPEIEHGNY(deSTTQR	2362.0496	IPI00122117	IPI00122117	yes	yes	3	6.3342E-13	144.17
EQESMMN(deITIHIVK	1671.8324	IPI00990932	IPI00990932	yes	no	3	0.0015725	89.959
EQEN(deSTIYISFTPK	1655.8043	IPI00894972	IPI00894972	yes	no	2	0.0023331	90.561
ENS(deSYQVINWR	1394.6579	IPI0015331E	IPI0015331E	yes	yes	2	2.2523E-24	188.91
ENQN(deHSYSIK	1218.5629	IPI0012024E	IPI0012024E	yes	no	2	0.015982	78.342
ENPGHIYNKN(de)SQK	1640.8271	IPI0012217E	IPI0012217E	yes	no	2	0.0039985	110.38
ENIIDISN(deASK	1202.6143	IPI0085785E	IPI0085785E	yes	no	2	0.0026961	96.464
ENGVD(deAVHPGYGFISER	1845.8646	IPI00943457	IPI00943457	yes	no	2,3	0.0017706	87.287
EN(deMTFGSTIVTNP	1537.7446	IPI00466371	IPI01026704	no	no	2	1.6173E-10	160.8
EN(de)SDPTSPIRR	1383.7106	IPI0013692E	IPI0013692E	yes	no	2	0.0064102	86.772
EN(de)SDPTSPIR	1227.6095	IPI0013692E	IPI0013692E	yes	no	2	0.0052755	86.288
EN(deGTFISKYEGGVETFAHIIVIR	2466.2543	IPI0011813C	IPI0011813C	yes	yes	3,4	8.3002E-86	224.86
EN(de)NSIHWK	1026.4883	IPI0012322C	IPI0012322C	yes	no	2	0.040779	74.92
EMN(deCSETISQIQK	1566.7018	IPI00459134	IPI00459134	yes	no	2,3	0.0002827	143.93
EMIHN(deATFCIVPR	1586.7698	IPI0012553C	IPI0012553C	yes	no	2	0.0033893	83.087
EMGNTVMDIIRNYTAN(deATSSR	2343.0947	IPI0010809E	IPI0010809E	yes	no	3	2.2524E-05	96.391
EMGNTVMDIIRN(deYTANATSSR	2343.0947	IPI0010809E	IPI0010809E	yes	no	3	2.2524E-05	96.391
EKVQSIQTIA(deANNSAIK	1885.0269	IPI00129304	IPI00129304	yes	yes	3	3.4288E-20	170.78
EKVEN(deGSETGPIPEIQPIIEGEVK	2688.3858	IPI00136012	IPI00136012	yes	yes	2,3,4	1.7541E-15	121.38
EKSCVAITDAFP(deQNMSR	1952.9084	IPI00405742	IPI00405742	yes	no	2,3	8.2829E-06	128.71
EKEDRPFHQAV(deVNDTQAFWHNK	2695.2891	IPI00406901	IPI00406901	yes	no	3,4	0.0036028	80.752
EIYESIWQN(deFTDSK	1758.8101	IPI0027269C	IPI0027269C	yes	yes	2	0.0013788	118.2
EIVSDPIYVEVQGIPYFIKQPESVN(deVTR	3218.6863	IPI00121254	IPI00121254	yes	yes	3,4	1.8178E-09	91.729
EIVHQSND(deTSNIFFSPVSIATAFAMISIGSK	3195.6274	IPI00406302	IPI00406302	no	no	3,4	4.1469E-27E	218.93
EITGIRN(de)SSQEGSTDVVAR	2131.0869	IPI0067739E	IPI0067739E	yes	no	2,3	7.6945E-80	226.57
EIQIAGFDPSQDSIGPKNN(deDSTINNSATTIIIGIQDCR	4101.9913	IPI0088174E	IPI0088174E	yes	no	4	0.0116	44.167
EIPVIN(deV)SIGPFSTSQVVAR	2112.1579	IPI00515432	IPI00515432	yes	no	2,3	1.6935E-10	131.65
EIN(de)SICPVSTSER	1731.8461	IPI0038130C	IPI0038130C	yes	yes	2,3	1.0026E-24	183.36
EIKGDGPFTVFPVPHADI(de)SNMSQDEIAR	3085.5179	IPI0098726E	IPI0098726E	yes	no	3	3.5116E-37	150.94
EIIYSN(deGSIIIFQMITMK	1987.0159	IPI0010853E	IPI0010853E	no	no	2,3	6.9607E-17E	269.49
EIIVHPN(de)YTR	1240.6564	IPI0011375C	IPI0011375C	yes	yes	2,3	1.3797E-18	175.15
EIIVDEIISN(deSSTIASYK	1981.0256	IPI00173181	IPI00173181	yes	no	2,3	4.1602E-28	181.34
EIISN(deASDAIDKIR	1543.8206	IPI0055492E	IPI0012952E	no	no	2	0.013148	105.99
EIIMDFAN(deSSAEITACMVR	2156.9904	IPI0022170E	IPI0022170E	yes	yes	3	3.0686E-09	130.4
EIHIIQEQN(deVSNV)FIDKEEFFIGSK	2986.4825	IPI00605187	IPI00605187	yes	no	3,4	6.8947E-20	138.82
EIGPIYTN(de)TADIGTDPR	1944.9793	IPI0031490C	IPI0031490C	yes	yes	2,3	0.0031003	76.378
EIGGAIDSGAAYVIEQASSHIGN(deSTQAAVR	2971.4635	IPI0045839C	IPI0045839C	yes	no	3	0.0008265	57.735
EIGAIYN(deCSNIAQDIEK	2050.0041	IPI0022141E	IPI0022141E	yes	no	2,3	5.5237E-12E	252.83
EIEYYVQGSFANAMYND(de)ACR	2284.9881	IPI0013260C	IPI0013260C	yes	yes	3	6.7886E-06	110.84
EIAAAN(de)ESAVK	1172.6037	IPI0011372E	IPI0011372E	yes	no	2	0.0019295	106.17
EHSIFIDIHPVTGIPMN(de)CSVK	2393.1872	IPI01008227	IPI01008227	yes	no	2,3	1.6757E-15	139.88
EGTYSIPTSN(deFTVPDIEIPSWISTGNYR	3143.5088	IPI0011909E	IPI0011909E	yes	yes	2,4	3.5167E-26	133.58
EGSRTDDEVVQREEEAIQI(de)DGINASQIR	3156.5283	IPI0012952E	IPI0012952E	yes	yes	3,4	1.1324E-42	169.41
EGPRNISTCFSSGDIFAAHN(de)ISER	2664.2351	IPI0012342E	IPI0012342E	yes	no	3	4.2599E-46	185.71
EGPRN(de)ISTCFSSGDIFAAHNISER	2664.2351	IPI0012342E	IPI0012342E	yes	no	3	4.2599E-46	185.71
EGN(deFTSTFDKK	1272.5986	IPI0015325E	IPI0015325E	yes	yes	2,3	3.1942E-07	158.01
EGN(deCSAQSGIAWQDCDFKDAEEAATGECTATVGR	3818.6207	IPI0011495E	IPI0011495E	yes	no	4	2.795E-09	83.834
EGN(deCSAQSGIAWQDCDFKDAEEAATGECTATVGR	3662.5196	IPI0011495E	IPI0011495E	yes	no	4	4.3005E-06	65.244
EGN(deCSAQSGIAWQDCDFK	2071.8364	IPI0011495E	IPI0011495E	yes	no	2,3	4.9004E-05	112.82
EGKFDEYDAIAGA(de)HPNITVYKK	2564.2911	IPI0011116C	IPI0011116C	yes	no	3,4	1.552E-14	134.29
EGKFDEYDAIAGA(de)HPNITVYK	2436.1961	IPI0011116C	IPI0011116C	yes	no	3,4	1.371E-58	203.89
EGFSAN(deYSVIQSSISEDFFK	2106.9746	IPI0012399E	IPI0012399E	yes	yes	2,3	3.6719E-19	165.19



EGDN(deTIQICIGNGNPPPEEFMFYIPGQPEGIR	3588.6654	IPI0012137E	IPI0012137E	yes	no		4	0.0025185	52.721
EGASEEETN(deISK	1292.5732	IPI0013834E	IPI0013834E	yes	yes		2	0.0001173	145.29
EFVENSECIQCHPECIPQAMN(deITCTGR	3279.3876	IPI0012119C	IPI0012119C	yes	no	3,4		1.5201E-48	175.86
EFQHN(deSTMYK	1446.6238	IPI0078844E	IPI0078844E	yes	no	2,3		0.0022739	98.105
EEQFN(deSTFR	1156.5149	IPI0047524E	IPI0047524E	yes	no	1,2		5.4597E-14	159.83
EEN(de)ATIATYPEFGVIDIK	2008.9993	IPI00124221	IPI00124221	yes	no	2,3		1.6157E-10E	243.95
EEIGTYPYTPTGEPVFGGIPQN(deASIVTHIAHTFQDIK	4190.0637	IPI00453571	IPI00453571	yes	no		4	3.1487E-14	82.726
EEAMIYHN(deQTSEIR	1719.7886	IPI0075627E	IPI0075627E	yes	no	2,3		0.0013156	124.09
EDTVTITCEGTHNPGN(deSSTQWFHNGR	2944.2794	IPI0012948E	IPI0012948E	yes	no		3	4.8151E-80	211.43
EDSCQINY(deSEGPCIGMQR	2271.9195	IPI0012735E	IPI0012735E	yes	yes	2,3		1.3685E-41	193.85
EDRPFHQAVVN(deDTQAFWHNK	2438.1516	IPI00406901	IPI00406901	yes	no		3	1.7703E-41	194.05
EDIIA(deIRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no		3	1.6472E-25	168.79
ED(deIIAIRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no		3	1.6472E-25	168.79
ECIGN(deCSEPDDPTK	1620.6396	IPI0012835E	IPI0012835E	yes	no		2	0.0015331	109.48
ECHTIQN(deYTIWR	1619.7515	IPI0012522C	IPI0012522C	yes	no	2,3		2.0293E-10E	247.88
EAYKN(deSIIYSQMOK	1814.9237	IPI0022170E	IPI0022170E	yes	no	2,3		3.1085E-11	162.48
EATIVGEN(deETYPR	1477.7049	IPI0013114E	IPI0013114E	yes	no		2	5.1192E-16	175.15
EASNHSSGAGIVQIN(deKSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	3.5425E-07	94.463
EASNHSSGAGIVQIN(deK	1610.8012	IPI00108844	IPI00108844	yes	no	2,3		3.9166E-25	182.15
EASN(deHSSGAGIVQINKSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	3.5425E-07	94.463
EASN(deHSSGAGIVQINK	1610.8012	IPI00108844	IPI00108844	yes	no	2,3		3.9166E-25	182.15
EASHYSIHDIVISYN(deTSDSTVFPGAVAK	3007.4563	IPI00222967	IPI00222967	yes	no		3	1.0352E-10E	222.48
EAQYN(deSTFR	1114.5043	IPI0080798E	IPI0080798E	yes	no		2	1.8341E-06	140.49
EAPFGTNCN(deITITSR	1679.7937	IPI0012925E	IPI0012925E	yes	no		2	0.0009597	101.42
EANIT(deEDQIIFPK	1663.8457	IPI0012212E	IPI0012212E	yes	no	2,3		1.7264E-16	176.25
EAINQAVN(deTTR	1215.6208	IPI0011691E	IPI0011691E	yes	no		2	0.000244	134.56
EAGNASQI(deFDSWIK	1677.8362	IPI0013458E	IPI0013458E	yes	yes	2,3		1.1878E-34	198.95
EAHNSAPFNF(deSIPPGFGR	2180.0552	IPI0011548E	IPI0011548E	yes	no		3	0.0016508	79.837
EAHNV(deSAPFNFSIPPGFGR	2180.0552	IPI0011548E	IPI0011548E	yes	no		3	0.0016508	79.837
EAFN(deETNQAIQTISR	1720.838	IPI00112614	IPI00112614	yes	yes	2,3		5.2857E-12E	252.82
EADN(deHTAFIR	1172.5574	IPI0011833E	IPI0011833E	yes	yes		2	0.0027502	103.08
EACIQHYVYN(deASYIVWK	2143.0197	IPI0012015E	IPI0012015E	yes	yes		2	5.3429E-07	136.35
DYYPIN(deESIASIPR	1749.8938	IPI00121627	IPI00121627	yes	yes	2,3		3.1626E-57	211.57
DYYIN(deKTENEK	1415.6569	IPI0039684C	IPI0039684C	yes	no	2,3		1.8784E-11	169.65
DYRPSAGN(deNSIQDQTVVFK	2173.044	IPI0032246E	IPI0032246E	yes	no	2,3		5.7926E-42	199.15
DWSQNMVFN(deCEDNPSR	2148.8266	IPI0015381C	IPI0015381C	yes	no		2	6.9531E-37	191.21
DWIWNQMHIDEKKN(deESIPHYVGK	2867.3337	IPI0013818C	IPI0013818C	yes	yes		3	0.0002893	85.087
DWCN(deWTIISR	1349.6187	IPI0012493E	IPI0012493E	yes	no		2	0.00078	118.48
DVIWFRPTIINDTGN(deYTCMIR	2584.2566	IPI0092988E	IPI0092988E	yes	no		3	0.0001785	92.39
DVIWFRPTIIN(deDTGNYTCMIR	2584.2566	IPI0092988E	IPI0092988E	yes	no		3	0.0001785	92.39
DVGSSTTN(deNSQACAFIEQYFHNSDITEFMR	3566.5467	IPI00130661	IPI00130661	yes	yes	3,4		2.1336E-87	205.13
DVFIPKPSWGN(deHTPIFR	2010.0476	IPI0011731E	IPI0011731E	yes	yes		3	0.0039561	90.367
DTYVN(de)ASQSIYGSSPR	1743.8064	IPI00122977	IPI00122977	yes	no	2,3		4.1261E-45	202.18
DTTGSHTFGMGCEITNN(deR	2271.9637	IPI00137987	IPI00137987	yes	yes		3	1.8104E-25	176.94
DTISIN(deATNIK	1188.635	IPI0012119C	IPI0012119C	yes	no		2	3.1922E-07	155.48
DTCAQECSHFNI(deTK	1709.7138	IPI00132474	IPI00132474	yes	no	2,3		1.3619E-56	218.21
DTAVEGEEIEVN(deCTAMASKPATTIR	2692.2684	IPI0085672E	IPI0085672E	yes	no	2,3		9.1555E-25	147.9
DSYPDGN(deITWYRNGK	1784.8118	IPI0012137E	IPI0012137E	yes	no	2,3		2.6731E-11	164.15
DSYPDGN(deITWYR	1485.6525	IPI0012137E	IPI0012137E	yes	no		2	0.0011379	124.12
DSVIN(deISESVEDGPR	1615.7689	IPI00114044	IPI00114044	yes	yes		3	4.2878E-05	139.86
DSGIWINGFDYTGMSHVTPHIPEIN(deDTIR	3284.5561	IPI0040722E	IPI0040722E	yes	yes	3,4		1.3836E-13	102.21
DSCESNQN(deITCR	1482.5827	IPI00466371	IPI00466371	no	no		2	3.6295E-24	189.3
DQGNV(deTDMASMK	1295.5486	IPI00471081	IPI00471081	yes	yes		2	0.0007711	126.09
DQCIVDDITYNVN(deDTFHKR	2352.0805	IPI0011353E	IPI0011353E	yes	no	2,3,4		0.0001412	97.904
DQCIVDDITYNVN(deDTFHK	2195.9793	IPI0011353E	IPI0011353E	yes	no	2,3		4.2894E-21	177.04
DNTTC(deYEFKK	1304.5707	IPI0011906E	IPI0011906E	yes	yes		2	0.0042924	106.62
DNTTC(deYEFK	1176.4757	IPI0011906E	IPI0011906E	yes	yes		2	0.018641	85.958
DNSCVDPPHVPN(deATIVTR	1990.9531	IPI0013001C	IPI0013001C	yes	no	2,3		2.4017E-07	135.18
DNATQEEIIHYIE(deK	1701.821	IPI0032119C	IPI0032119C	yes	no	2,3		1.8016E-08	160.48
DMSDEIGCVN(deVTQCDGPNKFK	2413.0348	IPI0031206E	IPI0031206E	yes	no		3	0.0005824	111.33
DKNGTAEPPIN(deASAGDQEEK	2226.0513	IPI0012334E	IPI0012334E	yes	yes	2,3		4.3154E-08	112.55
DKN(deGTAEPPINASAGDQEEK	2226.0513	IPI0012334E	IPI0012334E	yes	yes	2,3		4.3154E-08	112.55
DKISPIHIA(deINFSIDPK	1907.0516	IPI0011597E	IPI0011597E	yes	yes		3	0.0093404	76.391
DIYEYSWVQGPWNSN(deRTER	2399.0931	IPI00118674	IPI00118674	yes	yes	2,3		0.0001049	100.45
DIYEYSWVQGPWNSN(deR	2012.9017	IPI00118674	IPI00118674	yes	yes		2	0.0001662	121.72
DIVV(deEISQWWMKPNNTIHPNIR	2894.4497	IPI0031950E	IPI0031950E	yes	no	3,4		5.3856E-05	88.755
DIVQNVFMSN(deMSMDIQSHPSSCPK	2751.2125	IPI0012119C	IPI0012119C	yes	no	3,4		3.7008E-16	124.2
DIVGN(deITEIESEDIQIEAIIIR	2500.2731	IPI0012239E	IPI0012239E	yes	no	2,3		0	262.12
DISVFAPN(deMTEIKDVTQYR	2339.1831	IPI0085510E	IPI0085510E	yes	no	2,3		6.6104E-05	99.747
DISVFAPN(deMTEIK	1576.8171	IPI0085510E	IPI0085510E	yes	no		2	0.0021943	96.591
DISHSIYFFNTS(deDIR	1944.904	IPI00114457	IPI00114457	yes	yes		3	0.0007328	101.62
DIQNFIE(deVTSSVDVK	1806.9	IPI0099093E	IPI0099093E	yes	no	2,3		1.8749E-06	148.36
DIQDIHKDTEN(deR	1482.7063	IPI00129304	IPI00129304	yes	yes		2	0.0067507	98.407
DINSQIEIQNVN(deDTHITIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes	3,4		1.0456E-22	112.26
DINSQIEIQN(deVTNDTHITIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes	3,4		1.0456E-22	112.26
DIN(deSTAQNVMFYDMGSGSTVCTIVTYQTVK	3329.5254	IPI0012334E	IPI0012334E	yes	no	3,4		5.5776E-06	78.128
DIN(deHTAQGIIEKDSWK	1853.9272	IPI0012095E	IPI0012095E	yes	no		2	0.0013996	106.38
DIIFSDDTECISNIQN(deK	2010.9204	IPI0047108C	IPI0047108C	yes	no		2	2.9877E-19E	287.01
DIGTASHN(deFSGAIPR	1541.7587	IPI0022982C	IPI0022982C	yes	yes	2,3		7.5387E-05	138.19
DIGPAIAN(deSSHDVK	1422.7103	IPI00108811	IPI00108811	yes	yes	2,3		3.3207E-33	198.16
DIGMFAPN(deMTR	1251.574	IPI0099093E	IPI0099093E	yes	no		2	0.0077619	75.695
DIFTNQSDFADTTKDTTITIVIH(deK	2820.4182	IPI0011610E	IPI0011610E	yes	yes	3,4		1.4483E-38	172.3
DIFTN(de)QSDFADTTK	1601.7209	IPI0011610E	IPI0011610E	yes	no		2	4.6231E-24	188.39
DIEHHITNVNVSFYDDIVN(deGTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	2.9756E-46	181.54
DIEHHITNVN(deVSFYDDIVNGTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	2.9756E-46	181.54
DIDTDFTSN(deASQPETK	1767.7799	IPI0013057E	IPI0013057E	yes	yes		2	3.0912E-45	204.13

DIDMFIN(deASK	1152.5485	IPI00224752	IPI00224752	yes	yes		2	1.2012E-05	132.32
DIAVGDDYTN(deR	1237.5575	IPI00468674	IPI00468674	yes	no		2	0.0011462	107.03
DIAVFCHFTNAAN(deSSVR	1907.8948	IPI00876541	IPI00876541	yes	no	2,3		1.7966E-07	139.6
DHVNVSMEIATDFPFN(deTTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	3.9012E-29	155.25
DHVN(deVSMIEATDFPFNTTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	3.9012E-29	155.25
DGYAVANTN(deTSDVVK	1639.7478	IPI00129253	IPI00129253	yes	no		2	0.0002729	128.96
DGTSQPAICPQN(deVTMNMIEGIK	2290.0392	IPI00320204	IPI00320204	yes	yes	2,3		4.863E-18	142.43
DGSDSAAMVYN(deSSQEWGIR	2071.8905	IPI00119522	IPI00119522	yes	yes	2,3		6.355E-230	296.73
DGSCIGN(deSSR	1051.4353	IPI00119063	IPI00119063	yes	yes		2	0.0024682	104.82
DGQQN(deISIIYTEPGASQTQTGASFR	2668.2729	IPI0028481E	IPI0028481E	yes	no		3	3.5514E-14	116.35
DGIAIN(deITIR	1084.6241	IPI0011906E	IPI0011906E	yes	yes		2	9.6144E-06	134.3
DGASEEETN(deISK	1278.5576	IPI0038728E	IPI0038728E	yes	yes		2	0.0015123	110.92
DFIPSTISFTWNYQN(deNTEVIQIR	2842.3926	IPI0046805E	IPI0046805E	yes	no		3	2.1318E-09	117.37
DEIGNVSTSHIIIDDSV(deEMEIRPR	2837.4229	IPI0030903E	IPI0030903E	yes	yes		3	3.4398E-07	95.5
DDYRPTWTIN(deQTEPVAGNYYPVNT	2969.3944	IPI0038130E	IPI0038130E	yes	yes	2,3,4		3.7946E-33	167.34
DDIHPTIPAGQYFINI(deTYNYPVHSFDGRK	3377.6469	IPI0038731E	IPI0038731E	yes	no		4	0.041943	58.904
DDIHPTIPAGQYFINI(deTYNYPVHSFDGR	3249.552	IPI0038731E	IPI0038731E	yes	no	3,4		5.412E-66	198.49
DDAMVYN(de)VTSR	1269.566	IPI00406901	IPI00406901	yes	no		2	0.023236	67.519
DCVSCQN(deVSR	1223.5023	IPI0012119C	IPI0012119C	yes	no		2	0.0038027	99.752
DCDFIEDGEERN(deCTGK	1943.7626	IPI0012728C	IPI0012728C	yes	yes		3	0.011863	75.462
DAVRN(deITEVVPQIIDQIR	2078.1484	IPI0022344E	IPI0022344E	yes	yes		3	0.0001376	112.67
DATIQAYISSGN(deFSK	1600.7733	IPI0046921E	IPI0046921E	yes	yes	2,3		7.9179E-12	165.02
DAMVGN(deYTCEVTEISR	1843.808	IPI0012483C	IPI0012483C	yes	no	2,3		9.9354E-35	197.15
DAHFN(deSTITEFGETINNFVER	2440.1295	IPI00346062	IPI00346062	yes	yes		3	0.001381	77.899
DAGVGFPEYQEEDN(deSTYNFR	2336.9822	IPI00308971	IPI00308971	yes	yes	2,3		3.4625E-13	147.17
DAGN(deYTVIITNPISMEK	1864.9241	IPI0012432E	IPI0012432E	yes	no	2,3		1.7618E-10	151.95
DAAQCSGGSVAHIAEIGIPTN(deITHIIIFR	3060.5815	IPI00331407	IPI00331407	yes	no		3	8.7511E-05	72.676
CYVIPIN(deTSIVMPPK	1730.9099	IPI0013075E	IPI0013075E	yes	yes		3	0.0027948	82.069
CVVHYEN(de)STVPEKK	1688.8192	IPI0040914E	IPI0040914E	yes	yes	2,3,4		2.8226E-86	235.73
CVVHYEN(de)STVPEK	1560.7242	IPI0040914E	IPI0040914E	yes	yes	2,3		0.0015101	136.3
CVAN(deYTGNGR	1110.4876	IPI0011179E	IPI0011179E	yes	yes		2	0.0019402	108.7
CTPPPYVENAVMISEN(deR	1975.9132	IPI00138061	IPI00138061	yes	no		3	1.5399E-60	212.39
CSWIITN(deITYFPETVPR	2096.0401	IPI0075806E	IPI0075806E	yes	no	2,3		0.0022933	82.529
CSIIHSN(de)SVK	1256.6547	IPI0013322E	IPI0013322E	yes	no	2,3		0.0003033	127.87
CRN(deYSIIIDQPK	1505.766	IPI00463774	IPI00463774	yes	no		3	0.0085043	88.187
CQSPYQMN(deGSDTVTCVNSR	2202.9092	IPI0013001C	IPI0013001C	no	no	2,3		1.1849E-79	223.29
CQSPYQMN(deGSDTVTCINGR	2186.9143	IPI0078844E	IPI0078844E	yes	no	2,3		3.718E-10	137.44
CQAYKN(deNSESFIHIYMYEVAR	2622.1995	IPI00130654	IPI00130654	yes	no		3	1.8639E-17	142.94
CQAIDFFPQN(deITMR	1739.8123	IPI0033144C	IPI0033144C	yes	no		3	0.0008508	134.68
CPMAGISHTTWHSN(deR	1753.7777	IPI00130764	IPI00130764	yes	no		2	0.002142	87.519
CPIITPFNDTNVVHTVNTAIAAFNTQNN(deGTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		2.5843E-40	141.48
CPIITPFN(deDTNVVHTVNTAIAAFNTQNNGTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		2.5843E-40	141.48
CNSVITYN(deITPVVQK	1734.8975	IPI00222967	IPI00222967	yes	no	2,3		1.3425E-24	181.51
CN(deTTQGNVTSIIR	1591.7624	IPI0013474E	IPI0013474E	yes	no		2	0.0006866	136.39
CN(deFTIIESR	1138.5441	IPI0022993E	IPI0022993E	yes	no		2	0.015334	90.913
CN(deASSQFICSSGR	1472.6136	IPI0011906E	IPI0011906E	yes	yes		2	0.0026477	126.48
CIVPHTVN(deISSAWR	1638.83	IPI00129041	IPI00129041	yes	no	2,3		0.0012958	129.77
CIVPDTVN(deISSWR	1632.793	IPI0013129E	IPI0013129E	yes	yes		2	0.0022608	96.591
CISPNVTSCACTIN(deFTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes	2,3		1.4769E-75	224.86
CISPN(deVTSCACTINFTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes	2,3		1.4769E-75	224.86
CISKN(deYTTDIITKIPGYPVK	2310.2294	IPI0012464C	IPI0012464C	yes	yes		3	0.003175	88.19
CISKN(deYTTDIITK	1555.7916	IPI0012464C	IPI0012464C	yes	yes		3	0.009486	95.428
CIQMSSFAN(deR	1212.538	IPI0032006E	IPI0032006E	yes	no		2	3.3746E-08	150.04
CIPHFAMIGNDTVMCTEQGN(deWTRIPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no		4	3.4946E-23	116.35
CIPHFAMIGNDTVMCTEQGN(deWTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	9.2848E-16	136.68
CIPHFAMIGN(deDTVMCTEQGNWTRIPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no		4	3.4946E-23	116.35
CIPHFAMIGN(deDTVMCTEQGNWTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	9.2848E-16	136.68
CHEGN(deGTFCGACR	1653.6082	IPI00132474	IPI00132474	yes	yes	2,3		0.0009478	134.04
CGWSPAEIN(deYTVPGIGSAGEASFISQCMK	3245.4468	IPI0033103E	IPI0033103E	yes	yes		3	5.9813E-30	125.54
CGNCN(deITSIEDDFCK	1960.7601	IPI0013759E	IPI0013759E	yes	yes	2,3		2.4647E-35	199.37
CFNAMEVDAIN(deSSHVPSTPVENPAQIR	2982.3964	IPI0031859E	IPI0031859E	yes	no	3,4		2.9971E-48	171.5
CFMAN(deGTWGYPFHGDYIK	2277.9612	IPI0012901C	IPI0012901C	yes	no	2,3		4.006E-19	164.53
CF(deANKVNISFPSAQSPASDTHIK	2631.3115	IPI0062466E	IPI0062466E	yes	yes	2,3,4		2.3268E-39	179.58
CEVICNQ(deSNKPITITVEQSR	2375.1573	IPI00626537	IPI00626537	yes	yes		3	4.7283E-08	125.73
CEQEASEDIKPAITGN(deK	1888.8837	IPI0013480E	IPI0013480E	yes	no	2,3		1.3031E-14	168.08
CDNN(deDTIIVR	1218.5663	IPI0046760C	IPI0046760C	yes	yes		2	1.5648E-07	147.26
CDISN(deSTEAGQK	1308.5616	IPI0015320E	IPI0015320E	yes	no		2	0.0036869	83.204
CDGDFDCEDRTDEAN(deCSVK	2291.8365	IPI0051536C	IPI0051536C	yes	no		3	7.7456E-10	133.71
CCGWVSHYN(deWTENEEIMGFTK	2647.093	IPI0010809E	IPI0010809E	yes	no		3	3.5657E-11	125.73
CAWSPEEEWN(deITTEIHPAER	2650.2122	IPI0012397E	IPI0012397E	yes	yes		3	1.9106E-11	126.4
CAMDIGVNYIGTVN(deVTHTGIQCQIWR	3005.431	IPI0011420E	IPI0011420E	yes	yes		3	1.0716E-16	126.02
CAISHAITIEFHQDGNPENVGIYN(deISR	3111.4832	IPI0022242E	IPI0022242E	yes	yes	3,4		3.6663E-34	134.47
AYVPN(deATWYDYETGEEIGWR	2419.0757	IPI0084869E	IPI0084869E	yes	yes	2,3		4.486E-13	146.1
AYVFERN(deQSVGDPNVDIIR	2191.1022	IPI00127447	IPI00127447	yes	yes	2,3		7.7119E-32	182.35
AYVAFPDFFRN(deSTATWWKK	2334.1586	IPI0084869E	IPI0084869E	yes	yes		3	0.0041783	88.73
AYTIFVPTNHSIETQGN(deNSVIGIDTVR	2945.4883	IPI0098726E	IPI0098726E	yes	no	3,4		3.0427E-65	194.68
AYTIFVPTN(deHSIETQGNNSVIGIDTVR	2945.4883	IPI0098726E	IPI0098726E	yes	no	3,4		3.0427E-65	194.68
AWNVPVSN(deSSQPVR	1568.7696	IPI0012964E	IPI0012964E	yes	no		2	8.0611E-56	210.38
AWN(deYTVDTPHGMFVSGTPFEQSVWITDVGSGPYGHTVKK	4295.0422	IPI00228567	IPI00228567	yes	yes		5	0.0001191	55.314
AWN(deYTVDTPHGMFVSGTPFEQSVWITDVGSGPYGHTVK	4166.9473	IPI00228567	IPI00228567	yes	yes		4	5.9206E-40	127.2
AWGTPCEICPSVN(deTSEYK	2097.9136	IPI0082822E	IPI0082822E	yes	no		2	1.3107E-05	119.4
AWGISVINPN(deKTK	1426.7932	IPI0098909E	IPI0098909E	yes	no	2,3		8.7953E-10	162.48
AVYEAIRN(deCSIEDDSVR	1995.932	IPI00856861	IPI00856861	yes	no		2	2.1775E-05	123.08
AVVGSYTTTN(deVSIAPR	1747.9468	IPI00330481	IPI00330481	yes	yes	2,3		4.3176E-21	179.14
AVTSISHDGSVICTFTAN(deSTYTK	2459.1639	IPI0045348E	IPI0045348E	yes	yes		3	1.1552E-09	113.51
AVN(deQTGAIQCDYSTSR	1932.8636	IPI00120674	IPI00120674	yes	no	2,3		4.1625E-37	194.92



AVKIN(deETIGNQDKTAER	1885.9858	IPI0030999E	IPI0030999E	yes	yes		3	9.307E-20	176.4
AVIVNN(deITTGEK	1257.6929	IPI0012890E	IPI0012890E	yes	yes		2	0.0010964	120.84
AVISMIN(deETMNEAPEETK	2005.9336	IPI0087541E	IPI0087541E	yes	no	2,3		1.5451E-17	278.4
AVIGDHGDE(deIFSVFGSPFIKDGASEEETNISK	3394.6205	IPI0038728E	IPI0038728E	yes	yes		4	9.5388E-07	83.934
AVGAVDWSDHPYGYN(deITIQAK	2304.1175	IPI00623114	IPI00623114	yes	no		3	2.5641E-09	117.67
AVAYGEKN(deITFQGPIPK	1831.9832	IPI00111794	IPI00111794	yes	no	2,3,4		1.9382E-10	248.54
ATYIVIN(deNSKPEITSK	1776.9622	IPI0028390C	IPI0028390C	yes	yes		3	0.013005	73.91
ATVN(deDSGEYR	1110.4942	IPI0012948E	IPI0012948E	yes	no		2	1.5741E-18	174.42
ATSQFQN(deGSITAFIPGISQCTVYSAK	2888.4378	IPI0034014C	IPI0034014C	yes	yes		3	1.4966E-13	103.53
ATPNEGFFNQN(deITTFYDRIGIYPR	2996.4457	IPI0031553E	IPI0031553E	yes	yes		3	0.018024	58.366
ATPNEGFFNQN(deITTFYDR	2297.0389	IPI0031553E	IPI0031553E	yes	yes	2,3		1.577E-12	143.04
ATHN(deDSGSYFCR	1413.5732	IPI0016287C	IPI0016287C	yes	yes		2	0.0047838	80.469
ATGTAHFFNFIIN(deTTDYR	2088.0065	IPI00132927	IPI00132927	yes	no		3	1.3107E-05	119.4
ATDADINDIIVYTIQEVTPN(deASK	2490.249	IPI0031413E	IPI0031413E	yes	no		3	0.0059633	61.222
ASVVN(deVTQHCTMESWESMNEVAR	2664.1731	IPI0012124C	IPI0012124C	yes	yes	2,3,4		9.4202E-19	143.04
ASSIMVN(deITEIFPKPK	1773.9699	IPI0040690I	IPI0040690I	yes	no		3	5.6526E-88	235.22
ASQQISN(deETSSFGFNIRK	2126.0756	IPI0015325E	IPI0015325E	yes	no		3	0.014853	66.826
ASQQISN(deETSSFGFNIR	1997.9807	IPI0015325E	IPI0015325E	yes	no	2,3		1.8463E-17	274.43
ASPGN(deGSGHSSAPSPDPTITR	1991.9297	IPI0031051E	IPI0031051E	yes	yes		3	0.010059	61.096
ASIPAPTIQSIN(deISWNR	1866.9952	IPI00228404	IPI00228404	yes	yes		3	2.7812E-20	172.57
ASGN(deFSQVDWFIIHKER	2033.0119	IPI0046912E	IPI0046912E	yes	no		3	0.011152	72.898
ASGN(deFSQVDWFIIHK	1747.8682	IPI0046912E	IPI0046912E	yes	no	2,3		7.1266E-18	178.14
ARN(deISGVVIADHSGSFHNR	2036.03	IPI00118674	IPI00118674	yes	yes	2,3		0.0078109	75.682
AQVAN(deISSIIGEISR	1556.8522	IPI0015341E	IPI0015341E	yes	yes		3	0.0024613	85.457
AQPAN(deQSVIISIYDEK	1774.9101	IPI0062635C	IPI0062635C	yes	yes	2,3		0.0015623	92.773
AQN(deSISEIVVFWQDQKQK	2132.0902	IPI0011394E	IPI0011394E	yes	no		3	0.0005035	93.768
AQITVTVTQTEHN(deITVSQIPAPQTWR	2918.525	IPI0033102E	IPI0033102E	yes	yes		3	0.0027451	60.991
AQAECRN(deTTHIQR	1696.8427	IPI0032122E	IPI0032122E	yes	yes		2	0.0055961	104.24
AQAAIDKAN(deASR	1214.6367	IPI0011906E	IPI0011906E	yes	yes		2	0.0071439	94.023
APSN(deVSTVIHIIYIPEEAK	2080.1205	IPI00121421	IPI00121421	yes	no	2,3		0.0001018	95.622
APSHNTTEP(deDPHSISPEIQAIIEVAQHVDVQNGR	3673.7721	IPI00165807	IPI00165807	yes	no	4,5		0.0039759	48.607
APSHN(de)TTEPDPHSISPEIQAIIEVAQHVDVQNGR	3673.7721	IPI00165807	IPI00165807	yes	no	4,5		0.0039759	48.607
APQHVVNHIPPYTN(deVSIK	2013.0796	IPI0012304C	IPI0012304C	yes	no	2,3		0.0012165	87.676
APIPTAIDTN(deSSKTPSIFPCASGAFSSFR	3026.4808	IPI0011980E	IPI0011980E	yes	no	3,4		7.8394E-10	93.21
APIPTAIDTN(deSSK	1313.6827	IPI0011980E	IPI0011980E	yes	no		2	0.039868	58.32
ANYNIPIMVTDGKPPMTN(deITDIR	2660.3302	IPI0012374E	IPI0012374E	yes	yes		3	0.0002977	78.456
ANVVA(deSAIAQIPQK	1408.8038	IPI0015314E	IPI0015314E	yes	yes	2,3		1.1145E-06	151.9
ANQVIPHN(deTTFQTEPTK	2038.0484	IPI00466371	IPI01026704	no	no	2,3		8.1981E-76	227
ANIQFGENGT(deTISAVTNK	1863.9327	IPI00127447	IPI00127447	yes	yes	2,3		3.1549E-48	200.45
ANIINFPEN(deNTFVINIEQITQDDTGSYK	3197.5517	IPI0031005E	IPI0031005E	yes	no	2,3,4		1.1112E-22	127.3
ANEQVIQNIN(deHTYK	1670.8376	IPI00876541	IPI00876541	yes	no	2,3		7.3341E-07	154.88
ANA(deSTFAVPSVNSADTR	1890.9072	IPI0011906E	IPI0011906E	yes	yes	2,3		0.0004441	89.859
AN(deYTIKGNENGNFK	1681.8424	IPI0013820E	IPI0013820E	yes	no		3	0.0055489	89.959
AN(deYTIK	821.4647	IPI0013820E	IPI0013820E	yes	no		2	0.006133	114.5
AN(deVTFTISK	979.53385	IPI00122584	IPI00122584	yes	yes		2	0.0052631	110.39
AN(deTTQPGIVEGGQVIK	1610.8628	IPI0012024E	IPI0012024E	yes	no	2,3		3.0642E-08	153.72
AN(deISSQVIK	958.54475	IPI00322867	IPI00322867	yes	no		2	0.0058637	108.43
AN(deHSHSGDYICK	1437.5732	IPI0012948E	IPI0012948E	yes	no	2,3		2.3941E-59	164.9
AN(deHSGAVVIK	1107.64	IPI0042083E	IPI0042083E	yes	no		2	0.0003032	122.33
AN(deGTTVHVGIHPSK	1416.7474	IPI0013246C	IPI0013246C	yes	no		3	0.0040037	80.312
AN(deDSDQGANAIDYTFHQAPEVVR	2646.1946	IPI00719927	IPI00719927	yes	no		3	1.2337E-19	134.86
AN(deATIEVK	844.46543	IPI00757771	IPI00757771	yes	no	1,2		0.01167	110.87
AMSSN(deETAAYK	1171.5179	IPI0031646E	IPI0031646E	yes	yes		2	1.0856E-32	191.79
AMSN(deISVR	876.44874	IPI0040574E	IPI0040574E	yes	no		2	2.0779E-28	179.37
AMN(deISASSMTITWK	1539.7425	IPI0046942E	IPI0046942E	yes	no	2,3		1.8871E-05	149.3
AMIINQHVPMESSHIIQFVN(deWSSIIPERYK	3694.9116	IPI0038728E	IPI0038728E	yes	yes	3,4,5		8.89E-07	82.302
AMIINQHVPMESSHIIQFVN(deWSSIIPERYK	3566.8167	IPI0038728E	IPI0038728E	yes	yes	3,4,5		9.1411E-23	112.74
AMIINQHVPMESSHIIQFVN(deWSSIIPER	3275.6584	IPI0038728E	IPI0038728E	yes	yes	3,4,5		6.5593E-38	153.24
AMGVNVIAANTHN(deTSMHMTGSGIYSPEAVR	3115.4638	IPI0023041E	IPI0023041E	yes	yes	3,4		4.6587E-30	122.51
AMFN(deITIIYPNNIIAISNMIPK	2490.3379	IPI0031950E	IPI0031950E	yes	yes	2,3,4		3.8552E-63	190.96
AIWIIN(deGSK	1000.5706	IPI0012466E	IPI0012466E	yes	yes		2	0.0022746	120.12
AIVASENN(deMSR	1190.5714	IPI00120674	IPI00120674	yes	no		2	0.0047427	100.93
AISPN(deSTISSAPK	1271.6721	IPI00460291	IPI00460291	yes	no		2	0.0032545	87.083
AISCIES(deSWKTIEQERNASVYTK	2846.3909	IPI0012322E	IPI0012322E	yes	yes		3	7.4421E-05	84.249
AINASAN(deITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no	2,3		7.6387E-49	207.76
AIN(deVTISSMGRNGIK	1559.8454	IPI00131091	IPI00131091	yes	no		2	0.0034407	118.08
AIN(deVTISSMGR	1147.6019	IPI00131091	IPI00131091	yes	no		2	0.0003158	127.17
AIN(deGSAIYTGSSIDFVR	1769.8948	IPI00877197	IPI00877197	yes	no	2,3		9.9232E-38	198.85
AIN(deDSIHYINR	1314.668	IPI0080834E	IPI0080834E	yes	no	2,3		6.3784E-11	162.68
AIN(deASQEETGAVFICPWK	2019.9724	IPI0031515E	IPI0031515E	yes	yes		3	0.0018141	83.966
AIN(deASANITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no	2,3		7.6387E-49	207.76
AIMVISEEPIIYMPPPCQPIIN(deTTESIR	3308.6859	IPI0027860E	IPI0027860E	yes	yes		4	5.4459E-07	84.68
AIMPFDSDIHDPCITN(deR	2113.9925	IPI0011348C	IPI0011348C	yes	no		3	1.0288E-07	138.57
AIMKEVMNIIQPIN(deVTK	1941.0791	IPI0012605C	IPI0012605C	yes	no		3	0.0001506	115.8
AIMDICDQIEKN(deQTK	1805.8652	IPI0065863E	IPI0065863E	yes	yes	2,3		0.0013096	109.35
AIKGETVN(deTSIPFSFEGIIFPK	2394.2835	IPI00119324	IPI00119324	yes	no		3	0.0002964	89.374
AIITN(deVSSVAIGSR	1386.7831	IPI00930841	IPI00930841	yes	yes		2	0.0022513	95.067
AIIQGIPEQN(deYTVQIIAYYKDK	2680.4476	IPI0033063E	IPI0033063E	yes	no		3	0.0016008	76.155
AIIQGIPEQN(deYTVQIIAYYK	2437.3257	IPI0033063E	IPI0033063E	yes	no		3	5.1197E-25	161.35
AIIPDFNIHEDPCIITN(deR	2137.0626	IPI00113854	IPI00113854	yes	no		3	0.00043	95.662
AIGYEN(deATQAIGR	1362.6892	IPI0011980E	IPI0011980E	yes	no		2	1.2531E-23	188.13
AIGITEMFEPSKAN(deFTK	1882.9499	IPI0011506E	IPI0011506E	yes	yes	2,3		8.0018E-05	119.68
AIEVAN(deGTVTSIPGATVTHICPGK	2368.2672	IPI0012618E	IPI0012618E	yes	yes		3	1.4584E-10	106.39
AIDIDPSKTN(deVSGGAIAIGHPIGGSGSR	2646.3725	IPI0022643C	IPI0022643C	yes	yes	3,4		4.6147E-48	178.11
AIAGIVYN(deSSGTEPCYDIYR	2248.047	IPI0033155C	IPI0033155C	yes	yes	2,3		3.0859E-15	264.23
AIADVIQDIADDN(deSSR	1701.817	IPI0013580E	IPI0013580E	yes	no		3	9.2544E-05	129.01

AIAAAGYDVEKN(deNSR	1577.7798	IPI00331597	IPI00331597	yes	no	2,3	5.0267E-17	178.67
AHINN(deISFPIR	1280.699	IPI00876541	IPI00876541	yes	yes		2 0.0006661	113.63
AHFSSIN(deITIR	1257.683	IPI00466371	IPI01026704	no	no		2 0.0050696	87.001
AGYFN(deFTSATITYIAQEDGPVVIGSTSAPGQGGIIAQR	3856.9272	IPI0046718C	IPI0046718C	yes	yes	4,5	1.0163E-50	138.88
AGVVVFN(deCSIR	1220.6336	IPI0031477E	IPI0031477E	yes	yes		2 0.0003387	130.1
AGPN(deGTIFVVDAYK	1450.7456	IPI0022199E	IPI0022199E	yes	yes	2,3	1.6659E-10	160.81
AGMASPIYN(deVTWSAGWK	1837.8821	IPI00666034	IPI00666034	yes	no	2,3	1.9804E-08	145.69
AGGSATIN(deCTVTSIIPVGPMPR	2101.066	IPI00849192	IPI00849192	yes	no		3 3.0675E-15	139.04
AGEQINNHVKN(deK	1350.7004	IPI0011610E	IPI0011610E	yes	no	2,3	0.0037544	116.03
AFYN(deGTWYRR	1332.6364	IPI0085831E	IPI0085831E	yes	no		2 0.014748	91.867
AFYN(deGTWYR	1176.5352	IPI0085831E	IPI0085831E	yes	no		2 0.016446	89.247
AFVEN(deITVIENSIVFK	1821.9877	IPI00120832	IPI00120832	yes	no	2,3	0	315.66
AFSTIIVN(deVSGK	1234.6921	IPI00222921	IPI00222921	yes	no		2 0.0024619	97.86
AFSGSPN(deITK	1020.524	IPI00119522	IPI00119522	yes	yes		2 0.0029332	101.95
AFQIN(deTFNIKVQPFNVTK	2108.1419	IPI00222967	IPI00222967	yes	no		3 0.0012671	94.922
AFPEVCN(deETMMAIWEECKPCIK	2742.1984	IPI0032042C	IPI0032042C	yes	no	3,4	4.8525E-09	114.96
AFNISPN(deDTSSGSCGINIVTIKVENK	2764.3702	IPI0046921E	IPI0046921E	yes	yes	3,4	5.1757E-16	122.53
AFNISPN(deDTSSGSCGINIVTIK	2294.1213	IPI0046921E	IPI0046921E	yes	yes	2,3	9.8632E-77	184.35
AFN(deITWISTDFK	1441.7242	IPI0011806E	IPI0011806E	yes	no		2 0.002211	102.97
AFN(deECCTIANK	1326.5697	IPI0033083E	IPI0033083E	yes	yes		2 1.4674E-70	228.12
AFMN(deSSFTIDPK	1356.6384	IPI00121362	IPI00121362	yes	no	2,3	1.7243E-10	162.49
AFITNF(deSMIIDGVTPGVVK	2171.1337	IPI00312711	IPI00312711	yes	no	2,3	5.8608E-09	129.2
AFIN(deGTGVETVVSADIPNAHGIAVDWVSR	2994.5199	IPI0011906E	IPI0011906E	yes	yes	2,3,4	3.8196E-86	181.35
AFFDETKN(deNTR	1341.6313	IPI00120674	IPI00120674	yes	no		2 0.0009073	127.87
AEQITIHAIGIGEAN(deKTQIR	2162.1808	IPI00990932	IPI00990932	yes	no		3 7.8977E-08	122.14
AEPPIINASAGDQ(deEEK	1554.7162	IPI00123342	IPI00123342	yes	yes	2,3	0.0008162	103.83
AEISN(deHTRPVIIVPGCIGNRIEAK	2643.4279	IPI0013350C	IPI0013350C	yes	yes		3 1.4763E-08	101.38
AEISN(deHTRPVIIVPGCIGNR	2202.1692	IPI0013350C	IPI0013350C	yes	yes	2,3	3.7738E-10	133.45
AEDYGPVEVISHWHPN(deITINIVDDHTPWVK	3480.7103	IPI00121627	IPI00121627	yes	yes	4,5	0.0001006	63.115
ADSIYSQVVGISASQAN(deISK	2037.0378	IPI0011511E	IPI0011511E	yes	yes	2,3	1.2545E-96	237
ADN(deYTYEHIR	1280.5786	IPI0027313E	IPI0027313E	yes	yes		2 0.0011019	114.86
ADANPPATEYHWTTIN(deGSIPK	2282.0968	IPI0031140E	IPI0031140E	yes	yes	2,3	1.3863E-38	184.56
ACVSINHVN(deETVMISITIEYAMQQTK	2979.4504	IPI0062466E	IPI0062466E	yes	no		3 8.6449E-06	81.48
ACN(deATNWIEYMFNK	1760.7651	IPI0013260C	IPI0013260C	yes	no		2 0.0013249	112.72
ACMN(deETRIIEIR	1520.7075	IPI0039684C	IPI0039684C	yes	no	2,3	0.0031513	118.87
AATCINPINGSVCERPAN(deHSAK	2366.1219	IPI00224752	IPI00224752	yes	yes		3 3.8675E-05	92.993
AATCINPIN(deGSVCERPANHSAK	2366.1219	IPI00224752	IPI00224752	yes	yes		3 3.8675E-05	92.993
AAN(deCTQVIVWHTR	1554.7725	IPI00116744	IPI00116744	yes	yes	2,3	9.5045E-05	148.57
AAIQFIQN(deYTVIASSVDSMDFINDATDVNDAISYVTR	4066.947	IPI0033988E	IPI0033988E	yes	no		4 7.5388E-27	115.77
AAGVIEDVYN(deRTQGIIAGHGIIQIA	2578.3867	IPI00169617	IPI00169617	yes	yes		3 1.4806E-55	193.85
AAGVIEDVYN(deR	1205.6041	IPI00169617	IPI00169617	yes	yes		2 0.0008847	110.08
AAGN(deSSAIGGQGTSGQPQR	1742.8296	IPI00125182	IPI00125182	yes	no		2 5.8159E-11	139.44
AAEN(deFTIIVK	1104.6179	IPI0047108E	IPI0047108E	yes	no		2 1.0787E-09	157.68
AACAVRPQEVMTMVN(deGTITNPVTGK	2513.273	IPI00308971	IPI00308971	yes	yes	2,3	2.1119E-05	86.539

N-terminal Ser/Thr  
ratio

281  
15.21%

### PNP strategy 2

#### De-glycopeptides Sequence

De-glycopeptides Sequence	Mass	Proteins	Leading r:	Unique (C	Unique (P	Charges	PEP	Score
AAAIKVN(de)DSVPFHIGWNSTER	2311.1709	IPI0046425E	IPI0046425E	yes	yes		3 9.2438E-08	125.73
AAAIKVNDSPVPHIGWN(de)STER	2311.1709	IPI0046425E	IPI0046425E	yes	yes		3 9.2438E-08	125.73
AACAVRPQEVMTMVN(de)GTITNPVTGK	2513.273	IPI00308971	IPI00308971	yes	yes		2 3.2299E-10	116.35
AAEN(de)FTIIVK	1104.6179	IPI0047108E	IPI0047108E	yes	no		2 0.0002505	127.87
AAGMN(de)HTK	828.39122	IPI0013114E	IPI0013114E	yes	no		2 0.017199	105.52
AAGVIEDVYN(de)RTQGIIAGHGIIQIA	2578.3867	IPI00169617	IPI00169617	yes	yes	2,3	9.1159E-16	139.02
AAIQFIQN(de)YTVIASSVDSMDFINDATDVNDAISYVTR	4066.947	IPI0033988E	IPI0033988E	yes	no		4 0.000111	61.099
AAN(de)CTQVIVWHTR	1554.7725	IPI00116744	IPI00116744	yes	yes	2,3	1.2005E-06	153.94
AATCINPIN(de)GSVCERPANHSAK	2366.1219	IPI00224752	IPI00224752	yes	yes		3 2.3399E-07	120.11
AATCINPINGSVCERPAN(de)HSAK	2366.1219	IPI00224752	IPI00224752	yes	yes		3 2.3399E-07	120.11
ACN(de)ATNWIEYMFNK	1760.7651	IPI0013260C	IPI0013260C	yes	no		2 0.011373	79.771
ADN(de)YTYEHIR	1280.5786	IPI0027313E	IPI0027313E	yes	yes	2,3	0.0017498	111.63
ADSIYSQVVGISASQAN(de)ISK	2037.0378	IPI0011511E	IPI0011511E	yes	yes		3 6.4933E-20	160.47
AEDYGPVEVISHWHPN(de)ITINIVDDHTPWVK	3480.7103	IPI00121627	IPI00121627	yes	yes	3,4,5	5.4646E-96	161.04
AEISN(de)HTRPVIIVPGCIGNR	2202.1692	IPI0013350C	IPI0013350C	yes	yes		3 1.3414E-13	151.62
AEISN(de)HTRPVIIVPGCIGNRIEAK	2643.4279	IPI0013350C	IPI0013350C	yes	yes	3,4	9.8587E-09	115.42
AEN(de)QSTNIPGPRNIPNSQMVNIR	2606.2983	IPI0077618E	IPI0077618E	yes	no		3 0.011781	66.045
AEPPIINASAGDQ(de)EEK	1554.7162	IPI00123342	IPI00123342	yes	yes	2,3	1.2037E-33	195.6
AEQITIHAIGIGEAN(de)QIR	2162.1808	IPI00990932	IPI00990932	yes	no		3 3.4702E-06	128.59
AEVIAPPTITVECN(de)GSEAHAR	2221.0797	IPI00117841	IPI00117841	yes	no		3 7.9562E-08	120.11
AFAMIIDKIEEDINSSMTN(de)STAASRPPVTIR	3377.6959	IPI00128904	IPI00128904	yes	yes		4 0.0001479	68.97
AFFDETKN(de)NTR	1341.6313	IPI00120674	IPI00120674	yes	no	2,3	0.0018118	113.61
AFIN(de)GTGVETVVSADIPNAHGIAVDWVSR	2994.5199	IPI0011906E	IPI0011906E	yes	yes	3,4	3.9069E-90	211.5
AFITNF(de)SMIIDGVTPGVVK	2171.1337	IPI00312711	IPI00312711	yes	no	2,3	4.0463E-94	233.31
AFITNF(de)SMIIDGVTPGVVKEK	2428.2712	IPI00312711	IPI00312711	yes	no	3,4	2.9148E-22	160.55
AFMN(de)SSFTIDPK	1356.6384	IPI00121362	IPI00121362	yes	no	2,3	6.8729E-29	149.69
AFN(de)ECCTIANK	1326.5697	IPI0033083E	IPI0033083E	yes	yes		2 1.1412E-30	188.91
AFN(de)ITWISTDFK	1441.7242	IPI0011806E	IPI0011806E	yes	no		2 7.9466E-31	190.85
AFNISPN(de)DTSSGSCGINIVTIK	2294.1213	IPI0046921E	IPI0046921E	yes	yes	2,3	1.7355E-17	273.51
AFNISPN(de)DTSSGSCGINIVTIKVENK	2764.3702	IPI0046921E	IPI0046921E	yes	yes		3 2.9511E-08	109.75
AFPEVCN(de)ETMMAIWEECKPCIK	2742.1984	IPI0032042C	IPI0032042C	yes	no	3,4	2.9622E-39	184.22
AFQIN(de)TFNIKVQPFNVTK	2108.1419	IPI00222967	IPI00222967	yes	no		3 0.0002991	117
AFSGSPN(de)ITK	1020.524	IPI00119522	IPI00119522	yes	yes		2 0.007393	101.39
AFSTIIVN(de)VSGK	1234.6921	IPI00222921	IPI00222921	yes	no		2 0.0008965	126.95
AFVEN(de)ITVIENSIVFK	1821.9877	IPI0074238E	IPI0074238E	yes	no	2,3	0	339.58

AFYN(de)GTWYR	1176.5352	IPI0085831E	IPI0085831E	yes	no	2	0.014021	101.11
AGAICISN(de)DTGIGISSVPIQAFK	2417.2624	IPI0012322C	IPI0012322C	yes	yes	3	1.25E-08	112.32
AGAICISN(de)DTGIGISSVPIQAFKPFVVEVSIPYSVVR	4037.1336	IPI0012322C	IPI0012322C	yes	yes	3	0.0003199	61.725
AGEQINNHVKN(de)K	1350.7004	IPI0011610E	IPI0011610E	yes	no	2	0.034181	89.403
AGEQINNHVKN(de)KTQGK	1764.9231	IPI0011610E	IPI0011610E	yes	no	2,3	0.0087803	86.548
AGGSATIN(de)CTVTSIIPVGPMPR	2101.066	IPI0084919E	IPI0084919E	yes	no	3	1.7312E-07	107.15
AGIN(de)ASYSEK	1038.4982	IPI00308971	IPI00308971	yes	yes	2	0.016896	90.827
AGMASPIYN(de)VTWSAGWK	1837.8821	IPI00666034	IPI00666034	yes	no	2,3	1.2221E-05	132.51
AGPN(de)GTIFVVDAYK	1450.7456	IPI0022199E	IPI0022199E	yes	yes	2,3	5.4015E-32	190.87
AGYFN(de)FTSATITYIAQEDGPVIGSTSAPGQGGIIAQR	3856.9272	IPI0046718C	IPI0046718C	yes	yes	4,5	2.6679E-35	143.79
AHINN(de)ISFPIR	1280.699	IPI00876541	IPI00876541	yes	yes	2	0.004183	97.734
AIAAAGYDVEKN(de)NSR	1577.7798	IPI00223714	IPI00223714	no	no	2	0.0008158	117.2
AIADVIQDIADDN(de)SSR	1701.817	IPI0013580E	IPI0013580E	yes	no	3	0.0011943	95.854
AIAGIVYN(de)SSGTEPCYDIYR	2248.047	IPI0033155C	IPI0033155C	yes	yes	2,3	1.0037E-11C	248.35
AIDIDPSKTN(de)VSGGAIAIGHPIGGSGSR	2646.3725	IPI0022643C	IPI0022643C	yes	yes	3,4	6.0429E-15E	171.05
AIEIQFGMN(de)ASSIFFIQGVR	2314.178	IPI0046921E	IPI0046921E	yes	yes	2,3	2.6699E-59	202.03
AIEISTVTCQIN(de)CSDHGHGCDSTFK	2779.2	IPI0045349E	IPI0045349E	yes	no	3	0.0009742	78.794
AIEISTVTCQIN(de)CSDHGHGCDSTFKR	2935.3011	IPI0045349E	IPI0045349E	yes	no	4	0.018329	59.857
AIEVAN(de)GTVTSIPGATVTIICPGK	2368.2672	IPI0012618E	IPI0012618E	yes	yes	3	5.6119E-12	117.48
AIGITEMFEPSKAN(de)FTK	1882.9499	IPI0011506E	IPI0011506E	yes	yes	2,3	0.0012722	105.39
AIGYEN(de)ATQAIGR	1362.6892	IPI0011980E	IPI0011980E	yes	no	2	5.4381E-54	210.91
AIIAN(de)ITCK	1002.5532	IPI0088030E	IPI0088030E	yes	no	2	0.0065507	107.79
AIIPFNDIHEDPCIITN(de)R	2137.0626	IPI00113854	IPI00113854	yes	no	3	0.0030227	83.106
AIIQGIPEQN(de)YTVQIIAYYK	2437.3257	IPI0033063E	IPI0033063E	yes	no	3	3.1138E-08	124.63
AIIQGIPEQN(de)YTVQIIAYYKDK	2680.4476	IPI0033063E	IPI0033063E	yes	no	3	0.0042432	77.39
AIIITN(de)VSSVAIGSR	1386.7831	IPI00930841	IPI00930841	yes	yes	2	0.0001603	119.54
AIKGETVN(de)TSIPFSFEGIIIFPK	2394.2835	IPI00119324	IPI00119324	yes	no	3	1E-07	122.29
AIMDICDQIEKN(de)QTK	1805.8652	IPI0065863E	IPI0065863E	yes	yes	2,3	9.1E-06	142.54
AIMKEVMNII(de)QPINVTK	1941.0791	IPI0012605C	IPI0012605C	yes	no	3	0.001159	107.69
AIMPFDSDIHDPCIIITN(de)R	2113.9925	IPI00929801	IPI00929801	yes	no	2,3	3.0197E-12	153.86
AIMVISEEPIIYMPPPCQPIIN(de)TTESIR	3308.6859	IPI0027860E	IPI0027860E	yes	yes	4	2.8885E-06	95.71
AIN(de)ASANITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no	2,3	6.172E-105	240.42
AIN(de)ASQEETGAVFICPWK	2019.9724	IPI0031515E	IPI0031515E	yes	yes	2,3	1.0666E-08	141.6
AIN(de)DSIHYINR	1314.668	IPI0080834E	IPI0080834E	yes	no	3	0.0009218	110.38
AIN(de)FTIPFFDSSR	1513.7565	IPI00828867	IPI00828867	yes	yes	2	0.0033374	97.551
AIN(de)GSAIYTGSSIDFVR	1769.8948	IPI00877197	IPI00877197	yes	no	2,3	2.1996E-141	262.25
AIN(de)VTISSMGR	1147.6019	IPI00131091	IPI00131091	yes	no	2	0.0004778	131.17
AIN(de)VTISSMGRNGIK	1559.8454	IPI00131091	IPI00131091	yes	no	2	4.8433E-17	175.66
AINASAN(de)ITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no	2,3	6.172E-105	240.42
AINS(de)STEDGIKR	1289.6575	IPI0012916E	IPI0012916E	yes	yes	2	0.025942	82.543
AISCIES(de)SWKTIEQERNASFVYTK	2846.3909	IPI0012322C	IPI0012322C	yes	yes	3	0.017489	64.2
AISPN(de)STISSAPK	1271.6721	IPI00460291	IPI00460291	yes	no	2	0.0001823	140.82
AITIKDIIN(de)GTFSYK	1682.9243	IPI0012392E	IPI0012392E	yes	no	2	1.4779E-24	186.77
AIVAVDPGN(de)HTAPR	1416.7474	IPI00129631	IPI00129631	yes	yes	2	0.013854	77.912
AIVN(de)FTR	819.46029	IPI0051536C	IPI0051536C	yes	no	2	0.0090831	100.19
AIWIIN(de)GSK	1000.5706	IPI0012466E	IPI0012466E	yes	yes	2	0.0031096	119.68
AKGVAV(de)TNTSQIGFR	1547.842	IPI0047108E	IPI0047108E	yes	no	2,3	1.0612E-16	169.04
AMFN(de)ITIIYPNNIIAISNMIPK	2490.3379	IPI0031950E	IPI0031950E	yes	yes	2,3,4	2.5972E-12	143.57
AMGVNVIAANTHN(de)TSMHMTGSGIYSPEAVR	3115.4638	IPI0023041E	IPI0023041E	yes	yes	3,4	7.5349E-07	96.793
AMIINQHVPMESSHIIQFVN(de)WSSIIPER	3275.6584	IPI0038728E	IPI0038728E	yes	yes	3,4,5	5.7022E-28	156.88
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYK	3566.8167	IPI0038728E	IPI0038728E	yes	yes	3,4,5	0.0001201	77.689
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYKK	3694.9116	IPI0038728E	IPI0038728E	yes	yes	3,4,5	8.3699E-11	106.93
AMN(de)ISASSMTITWK	1539.7425	IPI0046942E	IPI0046942E	yes	no	2,3	1.4031E-05	143.05
AMN(de)TSQVEAMGIQMIPGYR	2095.9853	IPI0016987C	IPI0016987C	yes	yes	3	2.4267E-05	116.06
AMN(de)TSQVEAMGIQMIPGYRDPYHGRPITK	3260.5893	IPI0016987C	IPI0016987C	yes	yes	4	0.024014	50.986
AMSN(de)ISVR	876.44874	IPI0040574E	IPI0040574E	yes	no	2	5.6341E-33	179.37
AMSSN(de)ETAAYK	1171.5179	IPI0031646E	IPI0031646E	yes	yes	2	6.2524E-10	162.49
AN(de)DSDQGANAIDYTFHQAPEVVR	2646.1946	IPI00719927	IPI00719927	yes	no	3	0.0090161	61.616
AN(de)DSDQGANAIDYTFHQAPEVVR	2802.2957	IPI00719927	IPI00719927	yes	no	3	1.7145E-07	109.5
AN(de)HSGAVVIK	1107.64	IPI0042083E	IPI0042083E	yes	no	2	0.006283	93.345
AN(de)HSGAVVIKR	1263.7412	IPI0042083E	IPI0042083E	yes	no	2	0.016044	87.719
AN(de)TSIEIIIIEGVR	1413.7827	IPI0098851E	IPI0098851E	yes	no	2,3	6.0419E-10	160.48
AN(de)TSQPGVIQGGAVVYCPWGTSPIQCTTIQFDSK	3666.7447	IPI0011597E	IPI0011597E	yes	yes	4	4.1036E-07	83.939
AN(de)TTQPGIVEGGQVIK	1610.8628	IPI0012024E	IPI0012024E	yes	no	2,3	6.991E-26	185.02
ANEQVIQNIN(de)HTYK	1670.8376	IPI00876541	IPI00876541	yes	no	2,3	3.7705E-07	149
ANIQFGENGT(de)TISAVTNK	1863.9327	IPI00127447	IPI00127447	yes	yes	2,3	1.4013E-48	205.65
ANIQKGENPSQYGITAFNHPIN(de)ITK	2754.4089	IPI00112614	IPI00112614	yes	yes	3	9.6755E-09	114.92
ANQVIPHN(de)TTFQTEPTK	2038.0484	IPI00466371	IPI01026704	no	no	2,3	3.8786E-48	199.58
ANYNIPIMVTDSGKPPMTN(de)ITDIR	2660.3302	IPI0012374E	IPI0012374E	yes	yes	3	0.0016395	83.063
APIPTAIDTN(de)SSK	1313.6827	IPI0011980E	IPI0011980E	yes	no	2	0.014419	79.466
APIPTAIDTN(de)SSKTPSIFPCASGAFSSFR	3026.4808	IPI0011980E	IPI0011980E	yes	no	3,4	9.9927E-09	107.03
APQHVVNHIPPYTN(de)VSIK	2013.0796	IPI0012304C	IPI0012304C	yes	no	3	0.0055614	78.326
AQAIDKAN(de)ASR	1214.6367	IPI0011906E	IPI0011906E	yes	yes	2,3	1.1369E-81	229.75
AQAECRN(de)TTHIIQR	1696.8427	IPI0032122E	IPI0032122E	yes	yes	2	0.014268	88.087
AQITVTVTQTEHN(de)ITVSQIPAPQTR	2918.525	IPI0033102E	IPI0033102E	yes	yes	3	1.2829E-08	108.08
AQTN(de)YTCVAEIIYR	1700.8192	IPI0032305E	IPI0032305E	yes	no	2,3	4.8174E-16	169.37
AQVAN(de)ISSIIEISR	1556.8522	IPI0015341E	IPI0015341E	yes	yes	2,3	2.3039E-24	180.81
ASGN(de)FSQVDWFIHK	1747.8682	IPI0046912E	IPI0046912E	yes	no	2,3	2.2038E-33	192.96
ASQQISN(de)ETSSFGFNIR	1997.9807	IPI0015325E	IPI0015325E	yes	no	2,3	1.912E-123	178.72
ASQQISN(de)ETSSFGFNIRK	2126.0756	IPI0015325E	IPI0015325E	yes	no	2,3	2.7722E-07	116.6
ASSIMVN(de)ITEIFPKPK	1773.9699	IPI00406901	IPI00406901	yes	no	3	3.6475E-10E	249.3
ASVVN(de)VTQHCTMESWESMNEVAR	2664.1731	IPI0012124C	IPI0012124C	yes	yes	3,4	7.3464E-60	199.97
ASVVN(de)VTQHCTMESWESMNEVARR	2820.2742	IPI0012124C	IPI0012124C	yes	yes	3	0.050846	43.476
ATHAQPAIVTAPN(de)ETSPK	1831.9428	IPI0013795E	IPI0013795E	yes	yes	3	0.0074292	75.018
ATPNEGFFNQN(de)ITTFYYDR	2297.0389	IPI0031553E	IPI0031553E	yes	yes	2,3	5.7987E-20	164.94
ATSQFQN(de)GSIITAFIPGISQCTVYSAK	2888.4378	IPI0034014C	IPI0034014C	yes	yes	3	6.8393E-10	115.55



ATVN(de)DSGEYR	1110.4942	IPI0012948E	IPI0012948E	yes	no		2	0.0002738	125.72
AVAYGEKN(de)ITFQGPIPK	1831.9832	IPI00111794	IPI00111794	yes	no	2,3,4		8.3309E-74	225.32
AVGAVDWDSDHPYGYN(de)ITIQAK	2304.1175	IPI00623114	IPI00623114	yes	no		3	1.2793E-11	138.08
AVGN(de)STFAIACIQR	1506.7613	IPI00761772	IPI00761772	yes	no		2	0.0014262	106.52
AVIGDHGDEIFSVFGSPFIKDGASEEETN(de)ISK	3394.6205	IPI0038728E	IPI0038728E	yes	yes	3,4		1.2656E-07	98.299
AVISMIN(de)ETMNEAPEETK	2005.9336	IPI0087541E	IPI0087541E	yes	no	2,3		1.671E-75	228.3
AVIVNN(de)ITTGEK	1257.6929	IPI0012890E	IPI0012890E	yes	yes		2	0.01673	79.633
AVKIN(de)ETIGNQDK	1428.7573	IPI0030999E	IPI0030999E	yes	yes		2	0.050978	76.728
AVKIN(de)ETIGNQDKTAER	1885.9858	IPI0030999E	IPI0030999E	yes	yes		3	7.8277E-60	215.48
AVN(de)QTGAIYQCDYSTSR	1932.8636	IPI00120674	IPI00120674	yes	no		2	1.1319E-20	171.21
AVTSISHDGSVICTFTAN(de)STYTK	2459.1639	IPI0045348E	IPI0045348E	yes	yes		3	1.058E-12	144.27
AVVGSYTTTN(de)VSIIAPR	1747.9468	IPI00330481	IPI00330481	yes	yes	2,3		4.8337E-15	158.64
AVYEAIRN(de)CSIEDDSVR	1995.932	IPI00856861	IPI00856861	yes	no		2	0.0019527	97.235
AWEKEIHHLI(de)QEQNVSNNFIDKEEFFIGSK	3500.7365	IPI00605187	IPI00605187	yes	no	3,4		1.736E-26	149.18
AWGISVINPNK(de)TK	1426.7932	IPI0098909E	IPI0098909E	yes	no		3	0.0029178	110.8
AWGTPCEICPSVN(de)TSEYK	2097.9136	IPI00828222	IPI00828222	yes	no	2,3		7.7535E-12	148.36
AWN(de)YTVDTPHGMFVSGTPEEQSVWITDVGSGPYGHTVK	4166.9473	IPI00228567	IPI00228567	yes	yes	4,5		5.1652E-35	140.27
AWN(de)YTVDTPHGMFVSGTPEEQSVWITDVGSGPYGHTVKK	4295.0422	IPI00228567	IPI00228567	yes	yes	4,5		4.7438E-06	65.134
AY(de)AISGPTVQDGIPPFNWNRFNETIHR	3099.5315	IPI00471081	IPI00471081	yes	yes	3,4		0.0001619	91.166
AYTIFVPTN(de)HSIETQGNNSVIGIDTVR	2945.4883	IPI0098726E	IPI0098726E	yes	no	3,4		2.0107E-19	144.63
AYTIFVPTNHSIETQGN(de)NSVIGIDTVR	2945.4883	IPI0098726E	IPI0098726E	yes	no	3,4		2.0107E-19	144.63
AYVFERN(de)QSVGDPNVDIIR	2191.1022	IPI00127447	IPI00127447	yes	yes	2,3		1.2216E-41	195.38
AYVPN(de)ATWYDYETGEEIGWR	2419.0757	IPI0084869E	IPI0084869E	yes	yes	2,3		7.3646E-26	171.72
CAISHAITIEFHQDGNPENVGIYN(de)ISR	3111.4832	IPI0022242E	IPI0022242E	yes	yes	3,4,5		4.5498E-12	239.57
CAMDIGVNYIGTVN(de)VTHTGIQCQIWR	3005.431	IPI0011420E	IPI0011420E	yes	yes	3,4		1.4296E-22	157.28
CCGWVSHYN(de)WTENEEIMGFTK	2647.093	IPI0010809E	IPI0010809E	yes	no		3	2.9471E-13	147.06
CDGDFDCEDRTDEAN(de)CSVK	2291.8365	IPI0051536C	IPI0051536C	yes	no		3	0.034315	69.485
CDGDFDCEDRTDEAN(de)CSVKQPGEVCGPTHFQCVSTNR	4346.7416	IPI0051536C	IPI0051536C	yes	no		4	0.0069943	49.944
CEQEASEDIKPAITGN(de)K	1888.8837	IPI0013480E	IPI0013480E	yes	no	2,3		1.5348E-07	138.05
CEQEASEDIKPAITGN(de)KTMQYVPNSHDVK	3288.5391	IPI0013480E	IPI0013480E	yes	no		4	0.033764	51.586
CF(de)ANKVNISFPSAQSPASDTHIK	2631.3115	IPI0062466E	IPI0062466E	yes	yes	2,3,4		1.8159E-67	204.12
CFMAN(de)GTWGYPFHDGDYIK	2277.9612	IPI0094758E	IPI0094758E	yes	no		3	7.7606E-20	163.8
CFMAN(de)GTWGYPFHDGDYIKDQAIWSECKEPR	3777.6439	IPI0094758E	IPI0094758E	yes	yes		4	0.000207	67.655
CFNAMEVDAIN(de)SSHPVSTPVENPAQIR	2982.3964	IPI0031859E	IPI0031859E	yes	no	3,4		2.6106E-84	218.44
CGNCN(de)ITSIEDEDFCK	1960.7601	IPI0013759E	IPI0013759E	yes	yes	2,3		6.1255E-46	207.92
CGPPPAIPNAIPASDVN(de)RTDFESHHTIK	3004.4713	IPI0013480E	IPI0013480E	yes	no	3,4		0.0069127	62.064
CGWSPAEIN(de)YTVPGIGSAGEASFISQCMK	3245.4468	IPI00331032	IPI00331032	yes	yes		3	6.8524E-07	100.7
CHAGYIGDNCN(de)CSTDVSTCR	2345.8882	IPI0037795E	IPI0037795E	yes	yes		3	4.6209E-05	101.5
CHEGN(de)GTFECGACR	1653.6082	IPI00132474	IPI00132474	yes	yes	2,3		7.5876E-05	131.69
CIIVGNGGVIAN(de)K	1313.7126	IPI0031189E	IPI0031189E	yes	no		2	0.0010788	125.97
CIN(de)HTTQK	1000.476	IPI0012526E	IPI0012526E	yes	yes		2	0.0021491	135.83
CIPHFAMIGN(de)DTVMCTEQGNWTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	3.8324E-49	192.18
CIPHFAMIGN(de)DTVMCTEQGNWTRIPPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no	3,4		2.2201E-40	158.91
CIPHFAMIGNDTVMCTEQGN(de)WTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	3.8324E-49	192.18
CIPHFAMIGNDTVMCTEQGN(de)WTRIPPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no	3,4		2.2201E-40	158.91
CIQIQAINM(de)SSCPIDSR	1991.9227	IPI0064828E	IPI0064828E	yes	no		3	7.4915E-06	134.25
CISKN(de)YTTDIITK	1555.7916	IPI0012464C	IPI0012464C	yes	yes	2,3		0.0005664	140.31
CISPN(de)VTSCACTINFTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes	2,3		6.5941E-12	254.82
CISPNVTSCACTIN(de)FTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes	2,3		6.5941E-12	254.82
CIVPHTVN(de)ISSAWR	1638.83	IPI00129041	IPI00129041	yes	no	2,3		0.0019418	103.76
CN(de)ITIKDPTPADPIWYEA	2231.0933	IPI00114842	IPI00114842	yes	no		2	0.011223	79.676
CN(de)TTQGNEVTSIIR	1591.7624	IPI0013474E	IPI0013474E	yes	no		2	7.4834E-11	160.47
CNQFVDCEDASDEMND(de)CSATDCSSYFR	3167.1307	IPI0011906E	IPI0011906E	yes	yes		3	9.3405E-13	122.41
CNSVITYN(de)ITPVVQK	1734.8975	IPI00222967	IPI00222967	yes	no	2,3		7.6133E-15	277.94
CNTAAPMWIN(de)GSHPSSEIGIVSR	2457.1165	IPI00128334	IPI00128334	yes	yes		3	0.015743	59.339
CPIITPFN(de)DTNVVHTVNTAIAAFNTQNNGTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		4.4818E-06	79.67
CPIITPFNDTNVHTVNTAIAAFNTQNN(de)GTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		4.4818E-06	79.67
CQAIDFFPQN(de)ITMR	1739.8123	IPI0033144C	IPI0033144C	yes	no		3	0.000123	124.07
CQAIDFFPQN(de)ITMRWIKDNQPIDAK	3048.495	IPI0033144C	IPI0033144C	yes	no		3	0.054847	50.752
CQEI(de)ISVDCSTNNPAQANIRQEINDSIQVAER	3671.7268	IPI0032042C	IPI0032042C	yes	yes		3	3.0073E-07	93.667
CQIEN(de)GSFKENSQYIPIK	2154.0416	IPI0033083E	IPI0033083E	yes	yes		3	0.013751	79.81
CQSPYQMN(de)GSDTVTCVNSR	2202.9092	IPI0013001C	IPI0013001C	yes	no		2	7.6963E-14	153.04
CSGN(de)GTYTCGICECDPGYIGTR	2496.9767	IPI0037795E	IPI0037795E	yes	no		3	0.0021601	76.118
CSIIHSN(de)ISVK	1256.6547	IPI00133222	IPI00133222	yes	no	2,3		2.0537E-41	199.82
CTPPPYVENAVMISEN(de)R	1975.9132	IPI00138061	IPI00138061	yes	no	2,3		5.0866E-15	157.8
CV(de)VHYENSTVPEKKNITSPVGVQPIINEHTFCAGITK	4166.0929	IPI0040914E	IPI0040914E	yes	yes	4,5		1.0327E-11	98.189
CVN(de)ESYKK	1026.4804	IPI0033131E	IPI0033131E	yes	no		2	0.015465	128.38
CVVHYEN(de)STVPEK	1560.7242	IPI0040914E	IPI0040914E	yes	yes		2	0.0005456	127.02
CVVHYEN(de)STVPEKK	1688.8192	IPI0040914E	IPI0040914E	yes	yes	2,3,4		7.7923E-69	225.97
CVVHYENSTVPEKKNITS(de)PVGQPIINEHTFCAGITK	4166.0929	IPI0040914E	IPI0040914E	yes	yes	4,5		1.0327E-11	98.189
CVYEAICSN(de)VTSECPVVITR	2451.1233	IPI00405742	IPI00405742	yes	no		2	1.5922E-05	100.19
CWAPIIDN(de)DTASDNGSR	1890.8166	IPI0022634E	IPI0022634E	yes	no		2	0.0014888	94.544
CWAPIIDNDTASDN(de)GSR	1890.8166	IPI0022634E	IPI0022634E	yes	no		2	0.0014888	94.544
DAAQCSGGSVAHIAEIGIPTN(de)ITHIIIFR	3060.5815	IPI00331407	IPI00331407	yes	no	3,4		1.5689E-33	162.82
DAGN(de)YTVIITNPISMEK	1864.9241	IPI0012432E	IPI0012432E	yes	no	2,3		5.2113E-06	135.09
DAGVGFPEYQEEDN(de)STYNFR	2336.9822	IPI00308971	IPI00308971	yes	yes		2	1.9878E-79	221.51
DAMVGN(de)YTCEVTEISR	1843.808	IPI0012483C	IPI0012483C	yes	no	2,3		2.3233E-11	252.82
DATIQUAYISSGN(de)FSK	1600.7733	IPI0046921E	IPI0046921E	yes	yes		2	0.000967	108.14
DCDFIEDGEERNCTG(de)K	1943.7626	IPI0012728C	IPI0012728C	yes	yes	2,3		0.0020444	107.74
DCVSCQN(de)VSR	1223.5023	IPI0012119C	IPI0012119C	yes	no		2	6.2617E-23	186.74
DDIHPTIPAGQYFIN(de)ITYNYPVHSFDGR	3249.552	IPI0038731E	IPI0038731E	yes	no	3,4		1.102E-62	190.67
DDYRPTWTIN(de)QTEPVAGNYYPVNT	2969.3944	IPI0038130E	IPI0038130E	yes	yes	3,4		3.7171E-16	143.91
DEIGNVSTSHIIIDDSV(de)EMEIRPR	2837.4229	IPI0030903E	IPI0030903E	yes	yes		3	1.281E-12	126.25
DFIPSTISFTWNYQN(de)NTEVIQGIR	2842.3926	IPI0046805E	IPI0046805E	yes	no		3	0.0004114	84.946
DGIAIN(de)ITIR	1084.6241	IPI0011906E	IPI0011906E	yes	yes		2	2.4585E-05	145.28
DGIN(de)FSCQAEIDIRPHGGYIIR	2530.2387	IPI00117424	IPI00117424	yes	no		3	0.0011801	88.565

DGQQN(de)ISIIYTEPGASQTQTGASFR	2668.2729	IPI0028481E	IPI0028481E	yes	no		3	1.93E-13	130.37
DGSDSAAMVYN(de)SSQEWGIR	2071.8905	IPI00119522	IPI00119522	yes	yes	2,3		2.3929E-21E	292.6
DGTSQPAICPQN(de)VTMNMEGIK	2290.0392	IPI00320204	IPI00320204	yes	yes	2,3,4		7.1154E-08	119.37
DGTVTAGN(de)ASGVSDGAGAVIIASEDAVK	2531.2351	IPI0022643C	IPI0022643C	yes	yes		3	0.0001385	89.297
DHVN(de)VSMIEATDFPFNTTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	1.1611E-16	140.59
DHVNVSMEIATDFPFN(de)TTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	1.1611E-16	140.59
DIAVGDDYTN(de)R	1237.5575	IPI00468674	IPI00468674	yes	no		2	0.0045714	96.604
DIDMFN(de)ASK	1152.5485	IPI00224752	IPI00224752	yes	yes		2	0.0006274	115.33
DIDTDFTSN(de)ASQPETK	1767.7799	IPI00130573	IPI00130573	yes	yes		2	2.1932E-18	170.11
DIEHHITNVN(de)VSYFYDDIVNGTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	2.2553E-80	215.65
DIEHHITNVNVSFYDDIVN(de)GTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	2.2553E-80	215.65
DIFIN(de)VTPDYEENSIIQADVECK	2711.2636	IPI00314132	IPI00314132	yes	no		3	0.0006605	84.762
DIFTNQSDFADTTKDTTITVIH(de)K	2820.4182	IPI0011610E	IPI0011610E	yes	yes		3	6.2969E-08	106.86
DIGPAIAN(de)SSHDVK	1422.7103	IPI00108811	IPI00108811	yes	yes	2,3		2.4162E-11	165.49
DIGTASHN(de)FSGAIPR	1541.7587	IPI0022982C	IPI0022982C	yes	yes	2,3		1.6477E-19	178.14
DIIFSDDTECISNIQN(de)K	2010.9204	IPI0047108C	IPI0047108C	yes	no		2	1.226E-236	309.15
DIIFSDDTECISNIQN(de)KTTYK	2504.1741	IPI0047108C	IPI0047108C	yes	no		3	0.0048576	80.638
DIIHSTGHN(de)ISR	1461.7688	IPI00223987	IPI00223987	yes	yes	2,3		0.0002196	139.48
DIN(de)STAQNVMFYDMGSGSTVCTIVTYQTVK	3329.5254	IPI00123342	IPI00123342	yes	no	3,4		1.6219E-27	149.94
DINGNVFQDAVFN(de)QTVTVIER	2378.1866	IPI00110852	IPI00110852	yes	no		3	0.0038339	77.899
DINSQIEIQN(de)VTNDTHIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes	3,4		5.7202E-34	149.07
DINSQIEIQNVN(de)DTHIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes	3,4		5.7202E-34	149.07
DIQNFIE(de)VTSSVDVK	1806.9	IPI00990932	IPI00990932	yes	no		2	6.0961E-157	176.94
DISGN(de)ETHFTGSEVGFIPISCR	2550.2173	IPI00123652	IPI00123652	yes	no		3	1.6588E-07	109.72
DISHSIYMFFN(de)TSDIR	1944.904	IPI00114457	IPI00114457	yes	yes	2,3		3.026E-05	130.24
DISVFAPN(de)MTEIHK	1576.8171	IPI00855103	IPI00855103	yes	no		2	0.0001199	124.51
DISVFAPN(de)MTEIHKDVTQYR	2339.1831	IPI00855103	IPI00855103	yes	no		3	0.0018408	88.427
DITNIINNTF(de)IR	1432.7674	IPI0065003E	IPI0065003E	yes	no		2	0.0026054	101.53
DIVGN(de)ITEIESEDIQIEAIIMR	2500.2731	IPI0012239E	IPI0012239E	yes	no	2,3		2.7559E-207	197.46
DIVQNVFMSN(de)MSMDIQSHPSSCPK	2751.2125	IPI0012119C	IPI0012119C	yes	no	3,4		3.7107E-12	116.73
DIVV(de)EIYSQWMKNPNNTIHPNIR	2894.4497	IPI0031950E	IPI0031950E	yes	no	3,4		5.3323E-12	124.08
DIWN(de)VTGAK	1002.5134	IPI00652107	IPI00652107	yes	no		2	0.064725	71.555
DIYEYSWVQGPWNSN(de)RTER	2399.0931	IPI00118674	IPI00118674	yes	yes		3	0.0003995	96.673
DKISPIHIA(de)INFSIDPK	1907.0516	IPI0011597E	IPI0011597E	yes	yes		3	0.0042392	90.707
DKN(de)GTRAEPINASAGDQEEK	2226.0513	IPI00123342	IPI00123342	yes	yes		2	0.0027333	86.727
DKNGTRAEPIN(de)ASAGDQEEK	2226.0513	IPI00123342	IPI00123342	yes	yes		2	0.0027333	86.727
DMEEFVQSSGDHGVVVSIGSMVSN(de)MTEEK	3274.4468	IPI00128137	IPI00112322	no	no		3	3.3225E-77	206.33
DMSDEIGCVNVTQCDGPNK(de)FK	2413.0348	IPI00312063	IPI00312063	yes	no		3	4.1519E-07	111.78
DMSDGFISN(de)ITIQR	1595.7614	IPI00272381	IPI00272381	yes	no	2,3		2.9077E-34	198.74
DMWADYIIFMDIDNIITNPDTISIIAEN(de)K	3496.7146	IPI0016987C	IPI0016987C	yes	yes	3,4		1.1452E-07	105.03
DNATDS(de)VPIR	1086.5306	IPI00119063	IPI00119063	yes	yes		2	0.0016828	111.86
DNATQEEIIHYIE(de)K	1701.821	IPI0032119C	IPI0032119C	yes	no	2,3		3.0937E-23	181.51
DNQSCVDPHPVN(de)ATIVTR	1990.9531	IPI0013001C	IPI0013001C	yes	no	2,3		1.4013E-48	205.65
DNTTC(de)YEFK	1176.4757	IPI00119063	IPI00119063	yes	yes		2	0.036794	85.958
DNTTC(de)YEFKK	1304.5707	IPI00119063	IPI00119063	yes	yes		2	0.0032196	112.13
DNVN(de)CSGVYEHEPIEIGK	2058.9317	IPI00947577	IPI00947577	yes	yes	2,3		5.1879E-12	151.41
DQCIVDDITYNVN(de)DTFHK	2195.9793	IPI00975193	IPI00975193	yes	no	2,3		9.7815E-75	223.11
DQCIVDDITYNVN(de)DTFHKR	2352.0805	IPI00975193	IPI00975193	yes	no	2,3		7.2694E-05	117.3
DQDCDKF(de)NQCGTCTEFKECHTIQNYTIWR	3753.5705	IPI0012522C	IPI0012522C	yes	no		4	0.025662	52.97
DQGNV(de)TDMASMK	1295.5486	IPI00471081	IPI00471081	yes	yes	2,3		0.0001473	142.85
DSGIWINGFDYTGMSHVTPHIPEIN(de)DTIR	3284.5561	IPI00407222	IPI00407222	yes	yes	3,4		6.9718E-14	117.43
DSSGVINVMIN(de)GSEPK	1645.7981	IPI0013227E	IPI0013227E	yes	no		3	0.017829	69.485
DSYPDGN(de)ITWYR	1485.6525	IPI0012137E	IPI0012137E	yes	no		2	0.0006367	116.01
DSYPDGN(de)ITWYRNGK	1784.8118	IPI0012137E	IPI0012137E	yes	no	2,3		0.0011039	119.25
DTAVEGEEIEVNCTAMASKP(de)ATTIR	2692.2684	IPI00856723	IPI00856723	yes	no	2,3		5.8224E-18	119.38
DTCAQECSHFNI(de)TK	1709.7138	IPI00132474	IPI00132474	yes	no	2,3		4.4974E-07	147.35
DTISIN(de)ATNIK	1188.635	IPI0012119C	IPI0012119C	yes	no		2	6.3113E-68	228.12
DTN(de)GSQFFITTVK	1456.7198	IPI0013568E	IPI0013568E	yes	yes		2	0.00041	133.66
DTTGSHTFQGMFGCEITNN(de)R	2271.9637	IPI00137987	IPI00137987	yes	yes		3	4.3222E-20	162.77
DTYVN(de)ASQSIYGSSPR	1743.8064	IPI00122977	IPI00122977	yes	no		2	2.7296E-09	150.91
DVGS GTTN(de)NSQACAQFIEQYFHNSDITEFMR	3566.5467	IPI00130661	IPI00130661	yes	yes	3,4		1.0298E-41	167.28
DVIWFRPTIIN(de)DTGNYTCMIR	2584.2566	IPI0092988E	IPI0092988E	yes	no		3	3.8589E-16	153.86
DVIWFRPTIINDTGN(de)YTTCMIR	2584.2566	IPI0092988E	IPI0092988E	yes	no		3	3.8589E-16	153.86
DVTVIEGEVATISCQVN(de)K	1960.9776	IPI00856723	IPI00856723	yes	no		2	5.9561E-75	225.68
DWCN(de)WTIISR	1349.6187	IPI00124933	IPI00124933	yes	no		2	0.010358	97.911
DWIWNQMHIDEEN(de)ESIPHYVGK	2867.3337	IPI0013818C	IPI0013818C	yes	yes	3,4		8.512E-42	143.71
DWMPNN(de)HSVIIIDDFESPQK	2384.1107	IPI00221833	IPI00221833	yes	yes		3	1.1545E-09	142.26
DYCMYNNNN(de)WTR	1698.6555	IPI0012177E	IPI0012177E	yes	yes		2	0.0001926	142.38
DYRPSAGN(de)NSIYQDVTVVK	2173.044	IPI00322463	IPI00322463	yes	no	2,3		4.6531E-19	159.69
DYYIN(de)KTENEK	1415.6569	IPI0039684C	IPI0039684C	yes	no		2	0.014501	95.477
DYYPIN(de)ESIASIPR	1749.8938	IPI00121627	IPI00121627	yes	yes	2,3		1.0491E-24	184.99
E(de)AETVRNGIYNITVIAIDADGR	2389.2238	IPI0013820E	IPI0013820E	yes	no		3	0.0056922	81.807
EACIQHYVYN(de)ASYIVWK	2143.0197	IPI0012015E	IPI0012015E	yes	yes		2	2.7598E-05	127.22
EADDYN(de)ITISEVK	1495.7042	IPI00277141	IPI00277141	yes	yes		2	4.4184E-07	156.24
EADN(de)HTAFIR	1172.5574	IPI00118333	IPI00118333	yes	yes		2	0.000294	122.69
EAETV(de)RNGIYNITVIAIDADGR	2389.2238	IPI0013820E	IPI0013820E	yes	no		3	0.0056922	81.807
EAFIPQGGSVQVN(de)CSSSCK	2053.9197	IPI00122973	IPI00122973	yes	no	2,3		1.1424E-19	162.09
EAFN(de)ETNQAIQTISR	1720.838	IPI00112614	IPI00112614	yes	yes	2,3		5.9618E-11E	259.29
EAGNASQI(de)FDSWIK	1677.8362	IPI0013458E	IPI0013458E	yes	yes	2,3		1.5764E-24	183.23
EAKEN(de)ASR	903.44101	IPI00124954	IPI00124954	yes	yes		2	1.1496E-05	118.5
EANIT(de)EDQIIFFPK	1663.8457	IPI00122122	IPI00122122	yes	no	2,3		6.4732E-55	210.37
EAPFGTNCN(de)ITITSR	1679.7937	IPI00129253	IPI00129253	yes	no		2	1.7435E-05	134.25
EAQYN(de)STFR	1114.5043	IPI00807983	IPI00807983	yes	no		2	0.0016233	133.23
EASHYSIHDIVISYN(de)TSDSTVFPGAVAK	3007.4563	IPI00222967	IPI00222967	yes	no	2,3,4		2.6934E-51	183.56
EASN(de)HSSGAGIVQINK	1610.8012	IPI00108844	IPI00108844	yes	no	2,3		5.4976E-68	173.28
EASN(de)HSSGAGIVQINKSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	0.0045543	73.672

EASNHSSGAGIVQIN(de)K	1610.8012	IPI00108844	IPI00108844	yes	no	2,3	5.4976E-68	173.28
EASNHSSGAGIVQIN(de)KSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3 0.0045543	73.672
EATIVGEN(de)ETYPR	1477.7049	IPI00131143	IPI00131143	yes	no		2 3.1756E-10	163.99
EAYKN(de)ISIIYSQMOK	1814.9237	IPI00221706	IPI00221706	yes	no	2,3	9.9117E-17	169.64
ECHTIQN(de)YTIWR	1619.7515	IPI0012522C	IPI0012522C	yes	no	2,3	3.7762E-68	227.93
ECIGN(de)CSEPDDPTK	1620.6396	IPI0012835E	IPI0012835E	yes	no		2 0.0030274	98.281
ECSPPKAN(de)ITSDEI	1559.7137	IPI00466733	IPI00466733	yes	yes		2 7.1486E-23	182.89
ED(de)IIAIRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no	2,3	1.6963E-71	214.59
EDIIA(de)IRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no	2,3	1.6963E-71	214.59
EDRPFHQAVVN(de)DTQAFWHNK	2438.1516	IPI00406901	IPI00406901	yes	no		3 1.087E-25	174.87
EDSCQINY(de)SEGPCIGMQR	2271.9195	IPI00127352	IPI00127352	yes	yes	2,3	1.0214E-93	232.51
EDTVTITCEGTHNPGN(de)SSTQWFHNGR	2944.2794	IPI0012948E	IPI0012948E	yes	no		3 6.118E-68	199.99
EEEAIQIDGIN(de)ASQIR	1784.8905	IPI0012952E	IPI0012952E	yes	yes		2 3.9148E-67	159.81
EEN(de)ATIATYPEFGVIDIK	2008.9993	IPI00124221	IPI00124221	yes	no		2 6.6747E-61	214.46
EEQFN(de)STFR	1156.5149	IPI0047524E	IPI0047524E	yes	no		2 1.9361E-06	148.56
EETIYDN(de)ATSSVADRK	1910.9222	IPI00223987	IPI00223987	yes	yes	2,3	5.8349E-05	126.71
EFEAYVN(de)ASGEHGIVVFSIGSMVSEIPEKK	3252.6013	IPI0041718C	IPI0041718C	yes	no		4 6.3616E-05	82.665
EFQHN(de)STMYK	1446.6238	IPI00788443	IPI00788443	yes	no	2,3	0.0019871	103.91
EFVENSECIQCHPECIPQAMN(de)ITCTGR	3279.3876	IPI0012119C	IPI0012119C	yes	no	3,4	2.8804E-59	189.19
EGDN(de)ITIQICIGNGNPPPEEFMFYIPGQPEGIR	3588.6654	IPI0012137E	IPI0012137E	yes	no	3,4	2.7251E-07	88.708
EGFSAN(de)YSVIQSSISEDFK	2106.9746	IPI0012399E	IPI0012399E	yes	yes		2 1.1611E-41	189.48
EGKFDEVYDAIAGAHPN(de)ITVYK	2436.1961	IPI00111163	IPI00111163	yes	no	3,4	2.5432E-39	184.83
EGKFDEVYDAIAGAHPN(de)ITVYKK	2564.2911	IPI00111163	IPI00111163	yes	no	3,4	5.6377E-09	129.46
EGN(de)CSAQSGIAWQDCDFKDAEEAATGECTATVVK	3662.5196	IPI0011495E	IPI0011495E	yes	no	3,4	6.1134E-147	243.48
EGN(de)CSAQSGIAWQDCDFKDAEEAATGECTATVVKR	3818.6207	IPI0011495E	IPI0011495E	yes	no	3,4	1.7371E-26	135.84
EGN(de)FTSTFDK	1144.5037	IPI0015325E	IPI0015325E	yes	yes		2 0.060137	67.153
EGN(de)FTSTFDKK	1272.5986	IPI0015325E	IPI0015325E	yes	yes	2,3	0.000211	144.1
EGPRN(de)ISTCFSSGDIFAAHNISER	2664.2351	IPI0012342E	IPI0012342E	yes	no		3 4.1224E-20	151.89
EGPRNISTCFSSGDIFAAHN(de)ISER	2664.2351	IPI0012342E	IPI0012342E	yes	no		3 4.1224E-20	151.89
EGSRTDDEVVQREEEAIQI(de)DGINASQIR	3156.5283	IPI0012952E	IPI0012952E	yes	yes	3,4	1.4282E-21	137.38
EHSIFIDIHPVTGIPMN(de)CSVK	2393.1872	IPI01008227	IPI01008227	no	no	2,3,4	9.3061E-12	140.35
EI(de)QIAGFDPSQDSIGPKNNDSTINNSATTIIGIQDCR	4101.9913	IPI0088174E	IPI0088174E	yes	no		4 2.1075E-10	88.814
EIAN(de)ATTKPEDRNDPMIYK	2432.2006	IPI00461861	IPI00461861	yes	yes		3 0.0026249	84.375
EIDDC(de)EQANKIGAINSTISNESK	2535.1759	IPI00187353	IPI00187353	yes	yes		3 4.7563E-08	121.44
EIDDCEQANK(de)IGAINSTISNESK	2535.1759	IPI00187353	IPI00187353	yes	yes		3 4.7563E-08	121.44
EIGAIYN(de)CSNIAQDIEK	2050.0041	IPI0022141E	IPI0022141E	yes	no	2,3	2.7498E-48	202.34
EIGVVMYN(de)CSCIAR	1670.7579	IPI00130624	IPI00130624	yes	yes		2 1.0196E-42	198.87
EIHHIQEQN(de)VSNVFIDKEEFFIGSK	2986.4825	IPI00605187	IPI00605187	yes	no	3,4	3.881E-56	193.59
EIIMDFAN(de)SSAEITACMVR	2156.9904	IPI0022170E	IPI0022170E	yes	yes		3 1.1968E-79	227
EIIVDEIISN(de)SSTIASYK	1981.0256	IPI00173181	IPI00173181	yes	no		3 0.007128	75.376
EIIVHPN(de)YTR	1240.6564	IPI0011375C	IPI0011375C	yes	yes		2 2.9201E-08	157.38
EIIYSN(de)GSIIFQMITMK	1987.0159	IPI0010853E	IPI0010853E	no	no	2,3	7.6869E-21C	295.79
EIKGDPFTVFPVPHADI(de)ISNMSQDEIAR	3085.5179	IPI0098726E	IPI0098726E	yes	no		3 9.4499E-22	139.47
EIN(de)ISICPVSTSER	1731.8461	IPI00381303	IPI00381303	yes	yes	2,3	1.8516E-08	154.51
EIPVIN(de)VSIGPFSTSQVVAR	2112.1579	IPI00515432	IPI00515432	yes	no	2,3	1.1965E-09	142.26
EIQAPIGQSFCCGN(de)ASIVISPAVHIDIISIR	3364.7272	IPI0098909E	IPI0098909E	yes	no	3,4	2.799E-59	184.76
EIQIAGFDPSQDSIGPKNNDSTIN(de)NSATTIIGIQDCR	4101.9913	IPI0088174E	IPI0088174E	yes	no		4 2.1075E-10	88.814
EITD(de)TGKNAVNTYKKNEDDCVVR	2700.2119	IPI00266264	IPI00266264	yes	yes		3 5.9546E-08	120.9
EITGIRN(de)ISSQEGSTDVVAR	2131.0869	IPI0067739E	IPI0067739E	yes	no		2 6.968E-09	137.13
EIVGGIEIFITN(de)TSCR	1807.9138	IPI0045348E	IPI0045348E	yes	no		2 4.2326E-05	127.83
EIVHQRN(de)TSNIFFSPVSIATAFAMISIGSK	3195.6274	IPI00406302	IPI00406302	no	no		3 9.6821E-13	107.75
EIVSDPIYVEVQGIPIYFIKQPVSN(de)VTR	3218.6863	IPI00121254	IPI00121254	yes	yes	3,4	0.0001434	89.946
EKEDRPFHQAV(de)VNDTQAFWHNK	2695.2891	IPI00406901	IPI00406901	yes	no		3 1.0526E-22	165.66
EKSCVAITDAFP(de)QNMSR	1952.9084	IPI00405742	IPI00405742	yes	no		2 0.0025712	94.384
EKV(de)ENGSETGPIPEIQPIIEGEVK	2688.3858	IPI00136012	IPI00136012	yes	yes	2,3,4	4.3605E-80	213.05
EKVQSIQTIA(de)ANNSAIK	1885.0269	IPI00129304	IPI00129304	yes	yes		3 2.1509E-11	148.7
EMDIVFHEHQDN(de)GTQDDSIASVNTDFAFSIYK	3886.7632	IPI0013183C	IPI0013183C	yes	yes		4 0.0008918	54.311
EMGNTVMDIIRN(de)YTANATSSR	2343.0947	IPI0010809E	IPI0010809E	yes	no		3 0.0011175	87.24
EMGNTVMDIIRN(de)YTANATSSREEAWDYVQAQVK	3789.7727	IPI0010809E	IPI0010809E	yes	no		4 0.011749	50.857
EMGNTVMDIIRNYTAN(de)ATSSR	2343.0947	IPI0010809E	IPI0010809E	yes	no		3 0.0011175	87.24
EMGNTVMDIIRNYTAN(de)ATSSREEAWDYVQAQVK	3789.7727	IPI0010809E	IPI0010809E	yes	no		4 0.011749	50.857
EMIHN(de)ATFCIVPR	1586.7698	IPI0012553C	IPI0012553C	yes	no	2,3	0.0016233	105.03
EMN(de)CSETISQIQK	1566.7018	IPI00459134	IPI00459134	yes	no		2 0.0012276	107.99
EN(de)GTFSKYEGGVETFAHIIIVIR	2466.2543	IPI0011813C	IPI0011813C	yes	yes	3,4	2.8913E-10C	231.77
EN(de)MTFGSTIVTNP	1537.7446	IPI00466371	IPI01026704	no	no	2,3	1.6066E-07	153.79
ENGTFISKYEGGVETFAHIIIVIR(de)K	2594.3493	IPI0011813C	IPI0011813C	yes	yes	3,4	0.0063038	74.776
ENIFGIQAGGFQDREEEYYAEPGVTEAEPVATEDAN(de)STDSII	4633.0892	IPI00378224	IPI00378224	yes	yes		4 0.0086666	43.566
ENQN(de)HSYSIK	1218.5629	IPI0012024E	IPI0012024E	yes	no		2 0.022278	85.29
ENYAEIIDDGFIKN(de)ITAQICIDKK	2810.416	IPI0033988E	IPI0033988E	yes	no	3,4	3.3468E-20	150.94
EQEN(de)STIYISFTPK	1655.8043	IPI00894972	IPI00894972	yes	no		2 2.3279E-23	183.23
EQESMMN(de)ITIHIVK	1671.8324	IPI00990932	IPI00990932	yes	no	2,3	9.2935E-05	125.89
EQESMMN(de)ITIHIVKK	1799.9274	IPI00990932	IPI00990932	yes	no		3 0.033008	71.558
EQETCIAPEIEHGNY(de)STTQR	2362.0496	IPI00122117	IPI00122117	yes	yes		3 3.5868E-20	163.79
EQIN(de)ISIDHR	1223.6258	IPI00127407	IPI00127407	yes	no	2,3	0.0026899	108.47
EQN(de)YTCHVHHK	1451.6364	IPI00850057	IPI00850057	yes	no		2 0.0025784	102.4
EQN(de)YTCHVNHEGPEPITIR	2406.1386	IPI0031298C	IPI0031298C	yes	no		3 1.455E-06	126.84
EQN(de)YTCHVYHEGPEPITIR	2455.159	IPI00608044	IPI00608044	yes	no	2,3	1.9447E-20	165.66
EQN(de)YTCR	969.39743	IPI0010999E	IPI0010999E	yes	no		2 0.049796	88.948
EQSFQGSN(de)MTIFYR	1706.7723	IPI00453571	IPI00453571	yes	no		2 7.2206E-11	160.47
EQTVSDPFIVVSN(de)TSTFVPYEIK	2599.3058	IPI00785371	IPI00785371	yes	no		3 0.014645	60.272
EQVTVIN(de)R	957.52434	IPI0012015E	IPI0012015E	yes	yes		2 0.0092827	109.29
EREDVQAIN(de)ISVPYGPPIEDFQR	2671.3242	IPI01023131	IPI01023131	yes	no		3 0.0036868	79.143
ERTEVIIQGTVS(de)PNASAPDAVWEDYEFK	3150.5146	IPI00405437	IPI00405437	yes	no		3 1.375E-08	108.32
ESGIN(de)MTIPEENQPVVFNHIYNIK	2785.3745	IPI0040393E	IPI0040393E	yes	no		3 4.04E-27	162.42
ESGIQN(de)VSTCR	1249.5721	IPI01008227	IPI01008227	no	no		2 1.2131E-41	203.61
ESIIPVTIQCND(de)ITSSSHTIMYSYWTR	3086.4841	IPI00757771	IPI00757771	yes	no		3 0.0016528	68.369

ESNPITAQQTT(de)KIDAPTNIQFVNETDR	3030.4894	IPI00975193	IPI00975193	yes	no		3	3.288E-75	147.87
ESQTIGDQCVYN(de)STHIGFQR	2339.0601	IPI0011813C	IPI0011813C	yes	yes	2,3		2.407E-191	288.78
ESQTIGDQCVYN(de)STHIGFQRENGTFSK	3102.4101	IPI0011813C	IPI0011813C	yes	yes		3	4.7249E-13	121.33
ESQTIGDQCVYNSTHIGFQREN(de)GTFSK	3102.4101	IPI0011813C	IPI0011813C	yes	yes		3	4.7249E-13	121.33
ESSEHPWK(de)WTDNTEYNNTIPIRGEER	3187.4595	IPI0027643C	IPI0027643C	yes	yes	3,4		5.0836E-09	115.39
ESYIIISN(de)STMK	1384.6908	IPI0012392E	IPI0012392E	yes	no		2	0.0021704	102.87
ETAEYAAN(de)ITQAVFDYFEDYFAMEYAIPK	3409.5377	IPI0013458E	IPI0013458E	yes	no		3	0.0011728	63.372
ETFIIN(de)TTCVK	1324.6697	IPI0013819E	IPI0013819E	yes	yes		2	0.0004095	116.03
ETIVTIFDN(de)R	1206.6245	IPI0012723E	IPI0012723E	yes	no		2	0.0011551	113.63
ETMPEYN(de)ISITAR	1523.729	IPI0012961E	IPI0012961E	yes	yes		2	0.012937	80.312
ETVCIN(de)ATMCFHVK	1708.7735	IPI00466371	IPI01026704	no	no		2	0.0005004	113.72
ETYFN(de)ISK	1000.4866	IPI0015325E	IPI0015325E	yes	no		2	0.0072582	103.55
ETYFN(de)ISKK	1128.5815	IPI0015325E	IPI0015325E	yes	no		2	0.006552	127.76
ETYIETN(de)YTIK	1373.6715	IPI0012015E	IPI0012015E	yes	yes		2	0.0096114	87.667
EVHFFVNAS(de)DVDSVK	1691.8155	IPI0031004E	IPI0031004E	yes	yes	2,3		2.8034E-08	152.94
EVMN(de)FTAENIYK	1457.6861	IPI0017000E	IPI0017000E	yes	no		2	0.0009556	111.39
EVMNIIQPIN(de)VTK	1497.8225	IPI0012605C	IPI0012605C	yes	no		2	8.6857E-42	198.85
EVN(de)ITVIDRK	1185.6717	IPI0011138E	IPI0011138E	yes	no		2	0.0003539	133.07
EVNSQIDNNGCSTQEVN(de)ITEIQSK	2706.2403	IPI0012322E	IPI0012322E	yes	yes	2,3,4		1.5246E-14	251.12
EVNSQIDNNGCSTQEVN(de)ITEIQSKK	2834.3352	IPI0012322E	IPI0012322E	yes	yes		3	5.3449E-08	109.37
EVNVYMYIAN(de)GSAFNISNK	2133.0201	IPI00222967	IPI00222967	yes	no	2,3		1.8917E-42	197.14
EVNVYMYIAN(de)GSAFNISKNISFWDAPIGSSYMCNK	4103.8856	IPI00222967	IPI00222967	yes	no		4	0.031493	47.159
EVNVYMYIANGSAFN(de)ISNK	2133.0201	IPI00222967	IPI00222967	yes	no	2,3		1.8917E-42	197.14
EVNVYMYIANGSAFN(de)ISKNISFWDAPIGSSYMCNK	4103.8856	IPI00222967	IPI00222967	yes	no		4	0.031493	47.159
EVTEGGVVTVN(de)CSIQEEKPIFFK	2706.3575	IPI00406901	IPI00406901	yes	no		3	1.2602E-15	139.81
EVTEGGVVTVN(de)CSIQEEKPIFFKIEK	3076.5791	IPI00406901	IPI00406901	yes	no	3,4		9.3292E-05	93.804
EVTVIGVATAPTQVISNGIPVSN(de)FTYSPDNK	3217.6507	IPI0011196C	IPI0011196C	yes	yes	3,4		5.4441E-05	71.882
EWIPIN(de)HSVNSVVVR	1747.937	IPI0022475E	IPI0022475E	yes	yes	2,3		5.8567E-06	138.73
EWN(de)GTYHCIFR	1481.651	IPI00876541	IPI00876541	yes	no	2,3		0.003391	100.04
EYEGAVYPDND(de)TTDFQR	1903.8224	IPI00605187	IPI00605187	yes	no		2	2.028E-34	190.82
F(de)APPQPAEPWSFVNKNTTSYPPMCSQDAVGGQVISEIFTNR	4453.1147	IPI0038728E	IPI0038728E	yes	yes		5	0.0094011	44.023
F(de)APPQPAEPWSFVNKNTTSYPPMCSQDAVGGQVISEIFTNRK	4581.2097	IPI0038728E	IPI0038728E	yes	yes		7	0.019202	42.669
F(de)APPQPAEPWSSVKNATTYPPMCSQDAAR	3203.4805	IPI0012839E	IPI0012839E	yes	yes		3	0.0001289	86.791
F(de)DEFFSQGCAPGYEKNSTICDICIPIK	3252.4566	IPI0013978E	IPI0013978E	yes	no	2,3,4,5		7.842E-77	208.72
F(de)EDGVIDPGYPRNISEGFSGIPDNVDAAFAIPAHR	3742.8016	IPI0012924C	IPI0012924C	yes	yes		4	0.013852	45.836
F(de)IRNGIASGSGNCSTGPNGDGFSHAWSIIEVK	3334.5789	IPI00322497	IPI00322497	yes	yes		4	0.0002821	67.496
FAEIN(de)GSAICSYNIKPSEYITTSK	2692.3054	IPI00421237	IPI00421237	yes	no	3,4		0.0078553	70.094
FAIKDYR(de)PSAGNNSIYQDTVVFVK	2745.4126	IPI0032246E	IPI0032246E	yes	no	3,4		3.9584E-13	134.32
FAKNEDSN(de)FTIINHDNTANITVK	2832.4042	IPI0013818C	IPI0013818C	yes	yes		3	1.833E-26	160.2
FAKNEDSNFTIINHDNTAN(de)ITVK	2832.4042	IPI0013818C	IPI0013818C	yes	yes		3	1.833E-26	160.2
FANEYPNI(de)TR	1223.5935	IPI0013057E	IPI0013057E	yes	yes		2	0.015815	91.961
FAPPEAPEPWSG(de)VRDGTSPQAICPQNVTMMEGK	3810.7804	IPI00320204	IPI00320204	yes	yes		4	0.0018248	54.732
FAQPQWHIIHIN(de)GTFSNETEPDTEPCVDGWVYDR	4057.833	IPI0022634E	IPI0022634E	yes	no		4	2.4984E-05	70.57
FAQPQWHIIHINGTFSN(de)ETEPDTEPCVDGWVYDR	4057.833	IPI0022634E	IPI0022634E	yes	no		4	2.4984E-05	70.57
FAVESIVPSSISIMHSPDAQN(de)MSEVSISPMEISTFR	4019.9319	IPI00114044	IPI00114044	yes	yes	3,4,5		1.3771E-12	96.707
FCIIDVMSTGSSSVGN(de)ATR	2000.9296	IPI0074965E	IPI0074965E	yes	no	2,3		3.1806E-05	118.55
FCNIVPTEHCFIGN(de)GTEYR	2313.0307	IPI00227857	IPI00227857	yes	yes	2,3		5.8304E-14	154.26
FDAAGTSVHGGVPQN(de)GSICAHIPMIK	2663.2948	IPI0031553E	IPI0031553E	yes	yes	3,4		6.5515E-37	177.87
FDGEPDQSN(de)ITWFIK	2068.9564	IPI0062526E	IPI0062526E	yes	no	2,3		4.4653E-15	159.34
FDKGPFEKN(de)CSVQCAGMTIQTPIK	2868.3972	IPI0032060E	IPI0032060E	yes	no		3	0.0014427	84.327
FFN(de)DSIVDPVDSEWFGFYR	2339.0535	IPI0033131E	IPI0033131E	yes	no		2	4.7296E-65	211.33
FFN(de)FSWR	1002.4712	IPI0039684C	IPI0039684C	yes	no	1,2		0.0010163	130.27
FFQAFTKN(de)GSGATIPGAGANVQTIR	2552.3136	IPI00223231	IPI00223231	yes	no		3	1.1085E-15	137.23
FGEFGN(de)YSIIVQHASSGANK	2125.0229	IPI0031748E	IPI0031748E	yes	no	2,3		2.62E-128	257.73
FGHSPIIN(de)ITGGISHASDVVIYHQHK	2826.4565	IPI0011906E	IPI0011906E	yes	yes	3,4,5		8.6317E-29	167.53
FGIN(de)GSYAPGPAGIPGVPGK	1854.9628	IPI0028481E	IPI0028481E	yes	no		2	1.4146E-10	117.26
FGN(de)ETFIHIDNGR	1631.8056	IPI0017035E	IPI0017035E	yes	yes	2,3		6.4633E-07	148.68
FGTCSQICN(de)NTK	1428.6126	IPI0011906E	IPI0011906E	yes	yes	2,3		6.1482E-31	192.65
FGYIIHTDN(de)R	1234.6095	IPI0047520E	IPI0047520E	yes	no		2	0.0030545	107.24
FHSDINI(de)SESIIPAVIEK	2011.0626	IPI00831484	IPI00831484	yes	yes		3	9.7146E-07	136.01
FHVHQPVTQPFIQVTN(de)TTVK	2320.2328	IPI00658311	IPI00658311	yes	no	2,3,4		1.6093E-80	229.02
FHVNY(de)TQPIVAVK	1514.8245	IPI00123704	IPI00123704	yes	no	2,3		0.0028993	99.531
FI(de)EAGIYEVPIITDSGNPPKSNISIIR	3055.6594	IPI00323134	IPI00323134	yes	no	3,4		5.532E-64	198.64
FIEPYN(de)DSIQAQK	1551.7569	IPI00123704	IPI00123704	yes	yes		2	0.0006051	128.31
FIEYVTSECHFYN(de)GTQHVR	2386.0801	IPI0047458C	IPI0047458C	yes	no	2,3		2.4014E-11	147.24
FIFKN(de)QTIEIHVIYGR	2074.1364	IPI0012297E	IPI0012297E	yes	no	2,3,4		3.8252E-10	242.42
FIKGN(de)KIQCVDGNWTTIPVCIEEER	3215.6107	IPI0013001C	IPI0013001C	yes	no	3,4		1.2672E-29	161.53
FIN(de)ISSTGIR	1106.6084	IPI0013189E	IPI0013189E	yes	yes		2	0.0057342	103.34
FINYN(de)QTVSR	1240.62	IPI0022693E	IPI0022693E	yes	no		2	0.0026223	108.7
FIQ(de)KHINANPSEPATIIFTAAR	2525.3391	IPI00421157	IPI00421157	yes	yes		3	0.0029843	81.356
FIQSAEFFNY(de)TVR	1620.7936	IPI0012740E	IPI0012740E	yes	yes	2,3		8.0802E-68	220.97
FIRNGIASG(de)SGNCSTGPNGDGFSHAWSIIEVK	3334.5789	IPI00322497	IPI00322497	yes	yes		4	0.0002821	67.496
FITDVERN(de)ETAIYHVEAFK	2281.1379	IPI0046673E	IPI0046673E	yes	no		3	1.963E-41	193.32
FIWSEPQN(de)CSATK	1566.7137	IPI00118987	IPI00118987	yes	no		2	0.0004286	133.15
FMEFFVQFPHN(de)ATQTMNIR	2228.0659	IPI0013651E	IPI0013651E	yes	yes		3	0.0020118	84.14
FMGIPTKDDNIEHYKN(de)STVMAR	2566.2308	IPI0012392E	IPI0012392E	yes	no		3	0.0088704	73.688
FN(de)ETIHR	915.45626	IPI00471081	IPI00471081	yes	yes		2	0.012023	114.5
FN(de)ETRDITISIVSDINVR	2079.0596	IPI0099093E	IPI0099093E	yes	yes		3	1.0561E-11	153.22
FN(de)HTDRTIETIK	1473.7576	IPI00378224	IPI00378224	yes	yes	2,3		0.0021052	120.57
FN(de)ITETPEADIHQGFGNIIQSISQPEDQDQINIGNAMFIEK	4601.202	IPI0013183C	IPI0013183C	yes	no		4	3.3988E-05	57.325
FNSTE(de)YQVVTR	1342.6517	IPI0011906E	IPI0011906E	yes	no		2	1.6869E-10	166.48
FPMIPQEIFEIQFN(de)ISIQDQHQAIQFR	3482.7155	IPI0011980E	IPI0011980E	yes	yes		4	6.9572E-05	85.35
FQIIN(de)FSSSEIK	1411.7347	IPI0085672E	IPI0085672E	yes	no		2	0.0006073	132.97
FQISPQIQFSPEEVIGMVIN(de)YSR	2681.3523	IPI0012334E	IPI0012334E	yes	no	2,3		1.9578E-11	219.22
FQN(de)FSMATDQR	1343.5928	IPI0012817E	IPI0012817E	yes	no		2	0.00123	106.49
FQN(de)YTICESFSK	1522.6762	IPI00118291	IPI00118291	yes	no		2	0.000861	125.03



FQSSAVMAIQEASEAYIVGIFEDTN(de)ICAIHAK	3512.6956	IPI0028284E	IPI0028284E	yes	no		3	1.003E-70	192.85
FSATEVPEKGAGEVSP(de)AEHSSKPTNISAK	2954.4621	IPI0023071E	IPI0023071E	yes	no		3	1.2109E-75	201.29
FSEIIVNN(de)ATEEIIVK	1817.9775	IPI0032119C	IPI0032119C	yes	no		2	2.4203E-57	209.31
FSHN(de)GTCAAEGK	1277.5459	IPI0032067E	IPI0032067E	yes	yes	2,3		1.6756E-06	154.1
FSIMN(de)QSIISIPGSPFISR	2093.0979	IPI0033797E	IPI0033797E	yes	no		3	0.010013	69.485
FMSDXYDIQDVIADVGIKIDFTN(de)QSDFADTTK	3699.7138	IPI0011610E	IPI0011610E	yes	no	3,4		8.7393E-59	179.86
FSPPVVN(de)VTWIR	1413.7769	IPI0011080E	IPI0011080E	yes	no		3	0.0008523	127.87
FSVN(de)QTTIITHEK	1516.7886	IPI0084869E	IPI0084869E	yes	yes	2,3		9.0018E-42	198.85
FSWNN(de)ITNSIDIANISADFQGRPVDPTGAFANGSITFK	4200.0189	IPI0045943E	IPI0045943E	yes	yes		4	0.012822	47.044
FSWNNITNSIDIAN(de)ISADFQGRPVDPTGAFANGSITFK	4200.0189	IPI0045943E	IPI0045943E	yes	yes		4	0.012822	47.044
FSWNNITNSIDIANISADFQGRPVDPTGAFAN(de)GSITFK	4200.0189	IPI0045943E	IPI0045943E	yes	yes		4	0.012822	47.044
FTAPDTIFAN(de)GSVYPPNEGFCPCR	2716.205	IPI01008227	IPI01008227	no	no	2,3,4		1.0425E-35	176.65
FTAPDTIFAN(de)GSVYPPNEGFCPCR	2716.205	IPI01008227	IPI01008227	no	no	2,3,4		1.0425E-35	176.65
FTCN(de)QTTDVIIIHHSK	1775.8876	IPI0031950E	IPI0031950E	yes	yes	2,3		6.1226E-44	201.3
FTCN(de)QTTDVIIIHHSK	1903.9826	IPI0031950E	IPI0031950E	yes	yes		3	0.0050139	87.519
FTECCHEERPIN(de)TSAIK	2090.9514	IPI0087623E	IPI0087623E	yes	no	2,3		0.017429	78.505
FTFTSHTPGDHQICIHNS(de)STR	2442.1135	IPI0015346E	IPI0015346E	yes	no	2,3,4		5.4064E-31	175.56
FTFTSHTPGEHQICIHNS(de)STK	2428.123	IPI0047368C	IPI0047368C	yes	no	2,3,4		4.4812E-20E	222.7
FTQDAYSAVVKEN(de)STEAR	2014.9596	IPI00623114	IPI00623114	yes	no	2,3		8.8565E-13	157.22
FVHVN(de)TSAIK	1227.6976	IPI0015363E	IPI0015363E	yes	yes	2,3		0.0025784	102.4
FVKN(de)ITTWNEMKPGFYHGHISYIDFAK	3242.6012	IPI00131021	IPI00131021	yes	yes		4	0.0035649	67.194
FVPNSNMN(de)FTGQAYSGR	1888.8526	IPI0010853E	IPI0010853E	no	no	2,3		4.4516E-37	194.23
FYPEDIQIWIENGN(de)VSR	2192.0902	IPI0012915E	IPI0012915E	no	no		3	0.0002007	112.8
GAAAPSAPHWN(de)ETAEK	1635.7641	IPI0064828E	IPI0064828E	yes	no		2	0.0008044	104.94
GAFFPIKEDN(de)WSIPNR	1889.9424	IPI0013556C	IPI0013556C	yes	no	2,3		0.0001168	128.22
GAFISN(de)FTMTVNGMTFTSSIK	2253.081	IPI0097043E	IPI0097043E	yes	no	2,3		2.4141E-23	166.61
GAFVSKNPCN(de)ITR	1462.7351	IPI0030796E	IPI0030796E	yes	yes	2,3		0.0006328	139.48
GAFVSKNPCN(de)ITREDYAPIVK	2378.2053	IPI0030796E	IPI0030796E	yes	yes	2,3,4		2.2617E-30	174.87
GAGEVSPAESHSSKPTN(de)ISAK	1965.9756	IPI0023071E	IPI0023071E	yes	no	2,3,4		1.1409E-32	181.64
GAIDIMIQVN(de)MTPGHSSAPPK	2163.0816	IPI0022407E	IPI0022407E	yes	yes	2,3,4		1.4529E-49	198.14
GAIQIPTVSFSHEESN(de)TTAIAEFGYIR	3066.4934	IPI0022407E	IPI0022407E	yes	yes	3,4		2.7165E-41	171.84
GAIQIPTVSFSHEESN(de)TTAIAEFGYIRK	3194.5884	IPI0022407E	IPI0022407E	yes	yes	3,4		4.8253E-07	105.32
GAMITHQNIIN(de)DCSGFIK	2017.9714	IPI0011254E	IPI0011254E	yes	no	2,3		4.4783E-37	190.19
GCADYCNQ(de)TITKR	1585.6977	IPI0098726E	IPI0098726E	yes	no		3	0.0063486	98.353
GCGSIPGCPGTAGFHSN(de)QTFHFHK	2576.1689	IPI0011847E	IPI0011847E	yes	yes		3	0.0014632	74.325
GCIWEASN(de)TTR	1293.5772	IPI0084869E	IPI0084869E	yes	yes		2	7.8055E-42	205.56
GCKDNA(de)TDSVPIR	1431.6776	IPI0011906E	IPI0011906E	yes	yes	2,3		3.3051E-06	154.1
GDDIYTNV(de)TVSIVEAIVGFEMDITHIDGHK	3287.602	IPI00320241	IPI00320241	yes	yes		4	8.8051E-34	160.84
GDEKENITA(de)EAIDISIK	1844.9367	IPI0012472E	IPI0012472E	yes	no	2,3		3.6579E-15	165.45
GDGPFTVFPHADIIISN(de)MSQDEIAR	2715.2963	IPI0098726E	IPI0098726E	yes	no		3	4.0363E-35	168.81
GDHHQISHYN(de)ITGVR	1732.8394	IPI0033820E	IPI0033820E	yes	no		2	0.0004449	114.63
GDN(de)QSPIEIHK	1337.6575	IPI0022189C	IPI0022189C	yes	yes	2,3		1.5965E-41	199.31
GDPSIISVN(de)GTDFTFR	1724.837	IPI0046349E	IPI0046349E	yes	yes	2,3		1.0599E-12C	260.24
GDSGGAIVFIDN(de)ETQR	1677.7958	IPI0046706E	IPI0046706E	yes	no		2	3.6758E-13	162.59
GDHTHTQIIEGIQFN(de)ITQTSEADIHK	2795.3726	IPI0040630E	IPI0040630E	no	no	3,4		1.9372E-12E	244.31
GDTVARPIIHEFYDDN(de)NTWGIDR	2703.2677	IPI0084869E	IPI0084869E	yes	yes		3	1.3028E-27	134.32
GECYYTN(de)GTQR	1347.5514	IPI0011091C	IPI0011091C	yes	no		2	0.01085	85.554
GEIN(de)STIFSSR	1209.599	IPI0046006E	IPI0046006E	yes	no		2	0.0005828	125.03
GEIN(de)STIFSSRPK	1434.7467	IPI0046006E	IPI0046006E	yes	no	2,3		4.4346E-82	230.96
GEIQSEN(de)SSITISSNR	1807.8548	IPI00466371	IPI01026704	no	no	2,3		3.8437E-90	239.75
GENPSQYGITAFNHPIN(de)ITK	2200.0913	IPI00112614	IPI00112614	yes	yes		3	1.6605E-05	116.98
GETASIIICN(de)ISVR	1418.7188	IPI0032134E	IPI0032134E	yes	no		2	0.0001093	143.46
GFDTYFGYIIGSEDIYTHEACAPIESIN(de)GTR	3545.5722	IPI0065235E	IPI0065235E	yes	no		3	4.3338E-06	80.359
GFFGPDCTQCPGGFSNPCYKGN(de)CSDGVR	3197.2848	IPI0098726E	IPI0098726E	yes	no		3	8.7463E-06	96.303
GFFVQPTVFSN(de)VTDEMR	1972.9353	IPI0033636E	IPI0062666E	no	no	2,3		7.0085E-48	207.4
GFGVAFVGN(de)YTGSIPNEAAINTVR	2453.2339	IPI00165807	IPI00165807	yes	no	2,3		1.3161E-56	195.46
GFIIAN(de)ATYK	1096.5917	IPI00124497	IPI00124497	yes	no		2	0.0016013	112.13
GFN(de)ATYHVR	1063.5199	IPI0041102E	IPI0041102E	yes	yes		2	0.0033778	123.63
GFPQIIGAAGN(de)VSAGSVIIR	1926.0687	IPI0075485E	IPI0075485E	yes	no	2,3		4.8535E-55	156.11
GFQWVTGDN(de)HTSYSR	1753.7808	IPI0012942E	IPI0012942E	yes	yes		2	4.4324E-25	187
GFTQIQTIIPQDVPCPGGSNAWDN(de)VTSFK	3289.6078	IPI0047127E	IPI0047127E	yes	no		4	0.0077594	51.586
GFTQIQTIIPQDVPCPGGSNAWDN(de)VTSFKDK	3532.7297	IPI0047127E	IPI0047127E	yes	no		3	3.8636E-06	83.788
GGIN(de)ITAVTVTAENDHTVAFIGTSDGR	2715.3464	IPI0040574E	IPI0040574E	yes	no		3	5.4781E-06	98.121
GGITINANISG(de)DAFIK	1589.8413	IPI0013458E	IPI0013458E	yes	no		2	0.0007812	114.27
GGNSNGAICHFFPIYNNRN(de)YTDCTSEGR	3220.3839	IPI0097519E	IPI0097519E	yes	no		3	1.7793E-08	110.9
GGQEPVNEGTCVITYHN(de)GTGFCR	2599.0638	IPI0046790E	IPI0046790E	yes	no		3	0.0001632	93.269
GHAHIAAVNHDSYN(de)FSHR	2145.0253	IPI0013336E	IPI0013336E	yes	no	3,4		3.7821E-09	140.22
GHAIGISCQSEN(de)GTAPITYHIMK	2484.189	IPI00406901	IPI00406901	yes	no	3,4		1.3181E-31	175.56
GHFYNN(de)ISDVR	1369.6415	IPI0013556C	IPI0013556C	yes	no		2	0.0004575	119.76
GHICN(de)QTQNIQSSK	1613.758	IPI0098788E	IPI0098788E	yes	yes	2,3		0.0023395	101.75
GHIIAQVATNPQGITGTGN(de)TTSEMDPSSHR	3102.5153	IPI0032137E	IPI0032137E	yes	no	3,4		2.092E-52	186.96
GHIIAQVATNPQGITGTGN(de)TTSEMDPSSHRK	3230.6102	IPI0032137E	IPI0032137E	yes	no	3,4		9.1124E-16	120.33
GHTDRCDEAQAIQVWN(de)DTHPEVISQKPFDK	3520.643	IPI0010800E	IPI0010800E	yes	no		4	0.0041575	61.109
GHVDPAN(de)DTFDIDPR	1667.754	IPI00453501	IPI00453501	yes	no	2,3		0.0019923	99.011
GIAEVTEN(de)VTEGGVTK	1602.8101	IPI00130271	IPI00130271	yes	no		2	1.8824E-13E	269.92
GIAN(de)ISNFIR	1103.6087	IPI0012915E	IPI0012915E	no	no	1,2		6.9245E-07	152.7
GICPIFCHTN(de)GTPIGIGAR	2040.0033	IPI00420791	IPI00420791	yes	no		3	0.0003773	93.754
GIFPDGSHEISGN(de)TSITPDK	2070.9858	IPI0089497E	IPI0089497E	yes	no		3	6.9997E-06	123.14
GIIGHNN(de)KSSASFR	1486.7641	IPI0016287C	IPI0016287C	yes	yes		2	0.0001498	139.48
GIIGISN(de)ATYWHIPDTAYPGIYR	2690.3857	IPI00458077	IPI00458077	yes	yes		3	2.9295E-08	106.86
GIIN(de)ATISVAEINHPVTTYK	2140.1528	IPI0013057E	IPI0013057E	yes	yes	2,3		1.05E-215	293.01
GIMIIIN(de)DTQHFSNNVK	1942.9935	IPI00312711	IPI00312711	yes	no	2,3		4.7974E-74	221.85
GIMIIIN(de)DTQHFSNNVKGEIGQFYR	2893.4545	IPI00312711	IPI00312711	yes	no		3	3.7843E-16	143.57
GIMVGN(de)GSVIGVVQAVDAETGK	2100.0885	IPI0034215E	IPI0034215E	yes	no	2,3		7.8924E-101	233.28
GINIT(de)EDTYKPR	1405.7201	IPI0011980E	IPI0011980E	yes	yes	2,3		7.458E-42	207.47
GIRGPN(de)FTSPASITFTTGKPPQDIEAK	2942.5502	IPI0045841E	IPI0045841E	yes	no	3,4		0.0011037	73.546

GISYQIIGN(de)HSK	1315.6884	IPI00623114	IPI00623114	yes	no	3	0.0065839	90.653
GIVIGPIHKNQKDEIN(de)ETDIK	2360.27	IPI00930882	IPI00930882	yes	no	3	0.0004866	93.495
GIVISEDN(de)HTCQVPVICK	2068.0081	IPI00453489	IPI00453489	yes	no	3	0.014718	68.919
GIVMNYPHITN(de)ITTIGQSVEYR	2505.2686	IPI00130573	IPI00130573	yes	yes	3	1.4261E-48	190.23
GIVSGGVYNSHVGCIPYTIPPCEHHVNG(de)SRPPCTGEGDTPR	4430.0379	IPI00113517	IPI00113517	yes	yes	4,5	5.7082E-05	60.645
GIVTVKPCYN(de)YCSNIMR	2073.9798	IPI00312407	IPI00312407	yes	yes	3	0.00112	108.71
GIWKIPFSPENTREEDFYVN(de)ETSTVK	3085.5033	IPI00116109	IPI00116109	yes	yes	3,4	3.9498E-13	128.67
GIYHIN(de)ITVGGIPFK	1627.9086	IPI00115539	IPI00115539	yes	yes	3	3.3234E-05	130.1
GIYHIN(de)ITVGGIPFKESEIVQPINPR	2890.5705	IPI00115539	IPI00115539	yes	yes	3	0.0013248	78.975
GKNN(de)QTECFNHVR	1602.7321	IPI00124669	IPI00124669	yes	no	2,3	9.7367E-06	147.33
GKSN(de)QTECFNFIR	1599.7464	IPI00890869	IPI00890869	yes	yes	2	0.0018062	127.71
GMNYN(de)SSVVK	1097.5175	IPI00416289	IPI00416289	yes	yes	2	0.0030098	107.03
GMVIDENSNN(de)ITGAVISVTGINHDVTSGEHGDYFR	3717.7329	IPI00128260	IPI00128260	yes	yes	3,4	3.3096E-12	97.877
GN(de)HSIFGIEVATIGQGPDCPSVNER	2653.2555	IPI00459432	IPI00459432	yes	yes	3,4	2.8076E-16	139.95
GN(de)ISTEKFVEEIK	1492.7773	IPI00466371	IPI01026704	no	no	2	0.0015656	119.25
GN(de)ITEYQCHQYITK	1753.8094	IPI00122399	IPI00122399	yes	no	2,3	7.1933E-13	267.47
GN(de)MTWYAAGK	1097.4964	IPI00120953	IPI00120953	yes	yes	2	0.0002581	126.67
GN(de)QSSQWIYEAMAK	1611.7351	IPI00137792	IPI00137792	yes	yes	2	0.0005308	113.47
GN(de)SSIYPVSPSIQQIVIEK	2157.1681	IPI00985989	IPI00985989	yes	no	2,3	6.1068E-07	132.74
GN(de)TTAIDKEIAR	1287.6783	IPI00108539	IPI00108539	no	no	2,3	1.3881E-21	181.67
GNYDFVEAMIVNN(de)HTSIDVER	2422.1223	IPI00403589	IPI00403589	yes	yes	3	1.2175E-48	194.27
GNYGWQAGN(de)HSAFWGMTIDEGIR	2566.1448	IPI00115459	IPI00115459	yes	no	2,3	3.5759E-31	171.07
GPCSHICIIINYN(de)R	1602.7395	IPI00119063	IPI00119063	yes	yes	2,3	0.0005225	117.98
GPDGTEGISSTVN(de)GSTDPSAVTDIR	2432.1303	IPI00469429	IPI00469429	yes	no	2,3	1.137E-125	246.77
GPDISN(de)CTSHWVNQIAQK	2053.964	IPI00876559	IPI00876559	yes	no	3	7.2136E-27	139.49
GPECSQNY(de)TAPTGVIK	1720.809	IPI00123999	IPI00123999	yes	yes	2	0.025307	65.477
GPGIKPN(de)QTSK	1125.6142	IPI00221429	IPI00221429	yes	yes	2	5.6723E-06	152.7
GPGSKN(de)CTGCSAGIIMDDNR	2337.0148	IPI00138199	IPI00138199	yes	yes	3	1.6572E-07	118.52
GPIANPIWN(de)VTGFTGR	1698.8842	IPI00123040	IPI00123040	yes	no	3	0.0005276	114.31
GPICIDCTDGGFFSIQRN(de)ETHSICSACDESK	3663.5157	IPI00111289	IPI00111289	yes	yes	3,4	2.1993E-05	75.868
GPIDIN(de)MSEIAMDDIHEIFSRDPAIK	2926.4205	IPI00125747	IPI00125747	yes	yes	4	0.015148	61.345
GPN(de)VTVITGTR	1226.6983	IPI00877260	IPI00877260	yes	no	2	0.013534	82.069
GPNKIQC(de)VDGNWTTIPVCIEEER	2714.2792	IPI00130010	IPI00130010	yes	no	3	1.3917E-07	116.73
GPVKMPSQASAGNVYPQ(de)PIINSSMCIEDSR	3232.5315	IPI00224752	IPI00224752	yes	yes	4	0.0032187	60.621
GQTGIGFIYASGIGVN(de)SSQAK	2054.0433	IPI00131143	IPI00131143	yes	no	2,3	1.1048E-100	234.39
GQTQNYST(de)IIIEEASER	1937.933	IPI00124669	IPI00124669	yes	no	2,3	2.3424E-60	215.51
GRADECAIPYIGATCYCDIFCN(de)R	2781.1768	IPI00115459	IPI00115459	yes	no	3	5.7787E-179	277.6
GRHN(de)CSEPIDMEDISSGIGVTR	2429.1064	IPI00115892	IPI00115892	yes	yes	3	3.754E-22	158.44
GSAIPHPNSN(de)ATWEIK	1606.8104	IPI00119299	IPI00119299	yes	no	2,3	3.0774E-24	178.23
GSEVEDEDIEIFN(de)TSVQIRPPSTAPGPETAFFIER	3800.8381	IPI00381357	IPI00381357	yes	no	3,4	4.5698E-68	182.54
GSEVEDEDIEIFN(de)TSVQIRPPSTAPGPETAFFIERIEMEQAQK	4758.2971	IPI00381357	IPI00381357	yes	no	5	4.8446E-05	59.401
GSIN(de)VSYNIGPGFTGSEYSR	2103.9861	IPI00113042	IPI00113042	yes	no	2,3	4.1971E-110	242.22
GSIQSANDISSQTQGFQIHSMDN(de)ISAQIQTVR	3460.6641	IPI00330594	IPI00330594	yes	yes	3,4	4.6516E-59	179.81
GSN(de)FTAICVIK	1208.6223	IPI00120159	IPI00120159	yes	yes	2	5.7312E-15	171.32
GSNFN(de)ISK	865.42938	IPI00113057	IPI00113057	yes	yes	2	0.0043509	132.88
GSNFN(de)ISKTDNIEECQK	1982.9004	IPI00113057	IPI00113057	yes	yes	3	0.011785	82.102
GSPGN(de)ASQGSIIHSPQIAIQADPR	2537.2735	IPI00114044	IPI00114044	yes	yes	2,3	1.1593E-09	115.88
GSTQYIENIGFN(de)MSK	1687.7876	IPI00116109	IPI00116109	yes	yes	2,3	6.4796E-44	200.55
GTAGNAIMDGASQIVGEN(de)R	1859.8796	IPI00279079	IPI00279079	yes	yes	2,3	1.4407E-167	271.92
GTCEQGSPSIVTPPKDIWN(de)VTGAK	2454.2213	IPI00652107	IPI00652107	yes	no	3	6.3602E-08	119.38
GTDN(de)ITVR	874.45084	IPI00652679	IPI00652679	yes	no	2	0.0089756	111.61
GTDPSISPSPAATPPAPGAEISYIN(de)HTFR	2950.4461	IPI00762091	IPI00762091	yes	yes	3	1.6374E-19	130.3
GTFTDCAIANM(de)TQQIR	1825.8451	IPI00621027	IPI00621027	yes	no	2,3	1.8952E-139	260.85
GTIIGIDIQN(de)CSIK	1530.8076	IPI00471273	IPI00471273	yes	no	2	3.8549E-23	179.79
GTTN(de)TTSAGVPCQR	1448.6678	IPI00330542	IPI00330542	yes	no	2	0.0048641	88.561
GTTVITSISSVIHDS(de)KEFPNPEMFDPGHFINGNGNFK	4032.9316	IPI00134503	IPI00134503	yes	no	4	7.0467E-05	64.213
GTTVITSISSVIHDSKE(de)FPNPEMFDPGHFINGNGNFK	4032.9316	IPI00134503	IPI00134503	yes	no	4	7.0467E-05	64.213
GTYTIQGIIGCEIASDN(de)SSVPTAVFAINGEEFMK	3618.7222	IPI00322497	IPI00322497	yes	yes	4	1.2524E-05	71.117
GV(de)JIMVGNETTYEDGHGARKNITDIVEGAK	3073.5139	IPI00649189	IPI00649189	yes	no	3	6.4525E-19	128.38
GVAVTN(de)TSQIGFR	1348.7099	IPI00471089	IPI00471089	yes	no	2	2.8113E-31	194.12
GVDIDAPYYNYIISFTVPDIDN(de)VTVIDYDAR	3535.7035	IPI00119063	IPI00119063	yes	yes	4	0.0027928	53.679
GVDIN(de)ATGEWK	1188.5775	IPI00848693	IPI00848693	yes	yes	2	0.0064791	93.011
GVDSCHGDSGGAFQVFN(de)VTVPK	2445.1383	IPI00653679	IPI00653679	yes	no	3	3.9893E-13	128.05
GVENDVFIRYPNN(de)GSIVWGK	2263.1386	IPI00848693	IPI00848693	yes	yes	2,3	3.249E-11	122.44
GVFITNE(de)TGQPIIGK	1572.8512	IPI00111960	IPI00111960	yes	no	2,3	2.8998E-137	260.96
GVHFSPAASGITTSTVQVQGIPEYAN(de)YTFTVK	3369.6881	IPI00120222	IPI00120222	yes	yes	3	1.9119E-11	108.5
GVIMVGN(de)ETTYEDGHGAR	1904.8687	IPI00649189	IPI00649189	yes	no	2,3	1.4515E-37	192.16
GVIMVGN(de)ETTYEDGHGARKNITDIVEGAK	3073.5139	IPI00649189	IPI00649189	yes	no	3	6.4525E-19	128.38
GVIPGEDWTVFQSN(de)HSTYEPVIAK	2786.3915	IPI00404189	IPI00404189	yes	no	3,4	1.505E-05	98.269
GVN(de)ETIIVNEIK	1327.7347	IPI00338019	IPI00338019	yes	no	2	2.5294E-05	146.77
GVN(de)VTMPSQPGVPPISSTQIQIDPAIQEFQIVDISR	3860.9982	IPI00515360	IPI00515360	yes	no	3,4	9.3196E-13	103.14
GVN(de)VTMPSQPGVPPISSTQIQIDPAIQEFQIVDISRR	4017.0994	IPI00515360	IPI00515360	yes	no	4,5	1.3436E-08	82.126
GVNVITVN(de)ATDADSK	1502.7577	IPI00623114	IPI00623114	yes	no	2	1.5254E-17	174.39
GVQIIVFPEDGIHGFN(de)FTR	2145.1007	IPI00321379	IPI00321379	yes	no	2,3,4	1.4626E-19	160.47
GVSSSEN(de)FTSPVMEFWER	2087.9259	IPI00466652	IPI00466652	yes	no	2,3	1.6978E-89	235.24
GVSSSEN(de)FTSPVMEFWERR	2244.027	IPI00466652	IPI00466652	yes	no	3	0.0020701	87.647
GVTHIN(de)ISGIK	1137.6506	IPI00119063	IPI00119063	yes	yes	2,3	1.1819E-09	158.04
GVTHIN(de)ISGIKMPR	1521.845	IPI00119063	IPI00119063	yes	yes	3	0.012462	90.614
GVTNDIISVQGNTPSWIN(de)KTEK	2457.25	IPI00344689	IPI00344689	yes	yes	3	2.6561E-06	105.77
GVTSVSQIFHSPDIAIRDYVN(de)ASQSIYGSSPR	3551.7645	IPI00122977	IPI00122977	yes	no	3,4	7.6098E-59	181.24
GVVTDEQGIPIAN(de)ATISVSGINHGVK	2575.3606	IPI00875870	IPI00875870	yes	no	3	4.4446E-06	102.66
GWIN(de)GSIVGFYK	1339.6925	IPI00134589	IPI00134589	yes	no	2	1.5091E-54	218.06
GWKENPVEFDSIFN(de)ESK	2024.948	IPI00129070	IPI00129070	yes	no	2,3	2.0153E-20	173.87
GYIITIN(de)FTK	1168.6492	IPI00469219	IPI00469219	yes	yes	2	1.0374E-97	240.1
GYIITIN(de)FTKNTTR	1640.8886	IPI00469219	IPI00469219	yes	yes	2,3	4.4704E-83	235.22
GYIITINFTKN(de)TTR	1640.8886	IPI00469219	IPI00469219	yes	yes	2,3	4.4704E-83	235.22

GYITSEMFN(de)STFK	1670.765	IPI00262024	IPI00262024	yes	no	2,3	3.972E-136	268.93
GYPGCGN(de)KTASSVIEITCAK	2111.998	IPI00308971	IPI00308971	yes	yes		3 0.0012309	91.401
GYPGDEGGPGERGPPGVN(de)GTQGFQGCQGR	2984.322	IPI00830749	IPI00830749	yes	yes		3 0.0006392	68.97
HAEISFVITDGVVTGN(de)DSIEESVHSMR	2976.3924	IPI00621027	IPI00621027	yes	yes		3 1.1399E-60	151.01
HAIEYFNN(de)NTGSHIFAIR	2240.0875	IPI00400202	IPI00400202	yes	no		3 0.0010065	88.19
HAN(de)CSQVGTVVTCTCIPDYEGDGWSCR	3128.2845	IPI00987269	IPI00987269	yes	no		3 0.0001103	86.08
HAN(de)WTITPIK	1179.64	IPI00317359	IPI00317359	yes	yes	2,3	7.3331E-11	166.14
HDPN(de)MTCDYVIK	1491.6486	IPI00119299	IPI00119299	yes	no		2 0.0005942	132.79
HDYIIPEGAITN(de)TTR	1812.937	IPI00121421	IPI00121421	yes	no		2 0.0005777	112.5
HEEGHMIN(de)CTCFGQGR	1931.7825	IPI00975193	IPI00975193	yes	no	2,3	0.00225	88.561
HEN(de)NTKDNSIQHEFSITR	2169.0199	IPI00109727	IPI00109727	yes	yes	2,3	2.3317E-08	142.97
HF(de)IIDSNSVTRPSEFNWIWIPIPIK	3331.7758	IPI00319509	IPI00319509	yes	no		3 0.060377	49.638
HFFNVSDIEIAIVT(de)IVK	1830.988	IPI00466371	IPI01026704	no	no	2,3	4.3044E-45	200.94
HFKGQTQN(de)YSTIIIEASER	2350.1553	IPI00124669	IPI00124669	yes	no	2,3,4	1.663E-32	178.51
HFN(de)DSGACVPR	1258.5513	IPI00468814	IPI00468814	yes	yes		2 0.005258	95.094
HGFYCYIIGSTISTFTDAN(de)HTCTNEK	3036.3382	IPI00126189	IPI00126189	yes	yes		3 2.3854E-36	177.09
HGHFTGFN(de)GSTIR	1429.6851	IPI00117989	IPI00117989	yes	yes		2 0.017862	76.588
HGQIIKN(de)FTIIQGPGR	1972.1007	IPI00129304	IPI00129304	yes	yes	3,4	1.1875E-05	132.81
HIIEN(de)ATASVSEAR	1625.8009	IPI0039684C	IPI0039684C	yes	no	2,3	1.0413E-11	157.74
HIIEN(de)ATASVSEARERK	1753.8959	IPI0039684C	IPI0039684C	yes	no	2,3	2.6277E-25	182.02
HIN(de)ASNPSEPATIIFTAAR	2009.033	IPI00421157	IPI00421157	yes	yes	2,3	1.2113E-13	150.69
HIN(de)ITTSVAGGFR	1484.81	IPI00850413	IPI00850413	yes	yes	2,3	0.0082814	82.925
HIN(de)SSIPRPQPAIIITAAQDAAEVIK	2865.6076	IPI00762273	IPI00762273	yes	no	3,4	2.9675E-23	148.95
HISFGEDYPGIVNPIDHTN(de)VTAPQASMMFQYFVK	3852.828	IPI00626559	IPI00626559	yes	no	3,4	2.6243E-12	112.26
HITDISISGTIFVPQNSGIPKN(de)K	2465.3278	IPI0046760C	IPI0046760C	yes	yes		3 4.5173E-05	100.39
HIVFWN(de)SSNPK	1327.6673	IPI00130752	IPI00130752	yes	no		2 0.0004371	118.9
HIVN(de)ISYAFNK	1417.7718	IPI00626793	IPI00626793	yes	no		2 0.0021797	107.09
HIVNISYAFN(de)K	1417.7718	IPI00626793	IPI00626793	yes	no		2 0.0021797	107.09
HIWSIEISNKPN(de)ISEPEEPK	2346.1856	IPI00130573	IPI00130573	yes	yes		3 0.000141	101.05
HN(de)ITITQK	1010.5509	IPI00128359	IPI00128359	yes	no		2 0.04533	80.706
HNN(de)DTQHIWESDSNEFSVIADPR	2710.2008	IPI00129529	IPI00129529	yes	no	2,3,4	1.5899E-81	207.22
HPAN(de)ECAPYQFR	1488.6568	IPI00221859	IPI00221859	yes	yes		2 0.014006	81.709
HPGN(de)FSSISCDYFAVNQSR	2184.9647	IPI00115979	IPI00115979	yes	yes	2,3	4.3662E-06	128.79
HPGNFSSISCDYFAVN(de)QSR	2184.9647	IPI00115979	IPI00115979	yes	yes	2,3	4.3662E-06	128.79
HSIEHFNN(de)NTDHSIFTIR	2318.0941	IPI00114959	IPI00114959	yes	no	2,3,4	2.0326E-42	197.15
HSQQPIITYEKYN(de)VTDTPK	2261.1328	IPI00322419	IPI00322419	yes	yes	3,4	0.0037555	85.563
HSVIWNAMIHPIQN(de)MTIK	2132.1023	IPI00111794	IPI00111794	yes	no	2,3	9.8228E-05	113.01
HSVN(de)NTYSQFQDEYSIEEVMK	2547.1224	IPI00134131	IPI00134131	yes	no		3 3.6179E-30	170.53
HSVPVFCFPSFYN(de)DTDFIGEEIDIVDK	3278.523	IPI00416289	IPI00416289	yes	yes	3,4	0.0001413	80.683
HTDDITSIN(de)NTIVNIR	1824.933	IPI00129304	IPI00129304	yes	yes		2 0.0007478	106.36
HTGPGIISMANAGPNTN(de)GSQFFICTAK	2790.3218	IPI00554989	IPI00554989	yes	yes		3 8.2967E-60	196.02
HTIEIAPN(de)STAR	1308.6786	IPI0062080C	IPI0062080C	yes	no		2 0.0057994	92.295
HVCPVEN(de)WSYNESCSPDPAEQGGPK	2843.1915	IPI00128269	IPI00128269	yes	yes		3 2.3243E-56	189.82
HVCPVENWSYN(de)ESCSPDPAEQGGPK	2843.1915	IPI00128269	IPI00128269	yes	yes		3 2.3243E-56	189.82
HVEDKFN(de)ETTQR	1502.7114	IPI00130654	IPI00130654	yes	no	2,3	1.4981E-14	171.32
HVGPGVISMAGPNTN(de)GSQFFICTIK	2816.3738	IPI00116229	IPI00116229	yes	yes		3 3.3798E-14	124.81
HVTDMN(de)STIHIR	1535.7878	IPI00223449	IPI00223449	yes	yes		3 0.0002346	138.63
HVVIN(de)GSSFGADGFPYVQVIK	2233.1532	IPI00742377	IPI00742377	yes	no	2,3	1.3843E-05	100.97
HYAN(de)ITNGMYR	1338.6139	IPI00224073	IPI00224073	yes	no		2 0.0033924	99.215
I(de)AVISGCKNTTSAAMVHCIR	2188.0915	IPI00131219	IPI00131219	yes	yes	2,3,4	3.2131E-25	168.05
I(de)NHCKFDEFFSQGCAPGYEKNSTICIGPIK	3904.7681	IPI00139789	IPI00139789	yes	no		4 2.0546E-29	141.36
IACIN(de)GTVIR	1115.6121	IPI00134809	IPI00134809	yes	no		2 0.0024075	109.42
IAGGENN(de)CSGRVEIK	1602.7784	IPI00760109	IPI00760109	yes	no		2 0.0097614	89.624
IAGIAVTIAKPN(de)STSSFSVQCPNDGFIYSNSYGPEFAHCK	4575.1475	IPI00118674	IPI00118674	yes	yes		5 0.0026354	48.65
IAISFPN(de)ITSDGYPIYPTGWSSSDNVNCRPR	3582.7202	IPI00466371	IPI01026704	no	no	3,4,5	7.7968E-30	144.48
IAITPAHIIIFIADN(de)HTEPAAHFR	2554.3445	IPI00230324	IPI00230324	yes	no		4 6.1147E-06	103.88
IAMCQNIGYN(de)VTK	1510.7272	IPI00117094	IPI00117094	yes	yes		2 0.0006415	114.56
IAN(de)CTISDTIQEVNIEVQK	2174.0889	IPI00120351	IPI00120351	yes	yes		3 1.0358E-06	133.78
IAN(de)ETGGHSGPR	1251.5956	IPI0030923C	IPI0030923C	yes	no	2,3	0.0004417	132.79
IAN(de)FSQSCTIYSGDDIVEAIPKPCPGCPR	3251.505	IPI00114959	IPI00114959	yes	no	3,4	7.515E-172	261.54
IAPASN(de)VSHTVVIR	1462.8256	IPI0046718C	IPI0046718C	yes	yes	2,3	0.0021906	102.5
IAPASN(de)VSHTVVIRPIK	1801.0574	IPI0046718C	IPI0046718C	yes	yes	2,3,4	4.365E-88	230.82
IAQEGGAAAIIAN(de)NSVIIPSSR	2264.2488	IPI00121779	IPI00121779	yes	yes	2,3,4	1.6278E-09	129.78
IATIAN(de)FSEIGIEPGR	1686.8941	IPI00129041	IPI00129041	yes	no		2 0.001092	103.87
IATITCHIIPSDVSQVN(de)VSIIIWKPTFIK	3292.8257	IPI00466371	IPI01026704	no	no		4 0.01234	55.051
IAVDWESIGYNI(de)TR	1635.8257	IPI0012304C	IPI0012304C	yes	no		3 9.8699E-11	158.11
IAVTN(de)TTMTGTVIK	1448.7909	IPI00108041	IPI00108041	yes	yes		2 2.966E-05	139.66
IAYSNN(de)GSDWK	1253.5677	IPI00123999	IPI00123999	yes	yes		2 0.001056	108.9
ICEGDRFCIIDVMSTGSSVGN(de)ATR	2731.2364	IPI00749659	IPI00749659	yes	no		3 1.0277E-34	169.9
ICHTHGWN(de)ETSEIMPPGAVFSCIYR	2961.336	IPI00122399	IPI00122399	yes	no		3 3.9633E-12	116.45
ICIHQIN(de)ETVTVTASIVSQGR	2688.3905	IPI00123223	IPI00123223	yes	yes		3 0.0028205	69.779
ICKPESGECINCIHN(de)TTGFWCEK	2839.2186	IPI00221701	IPI00221701	yes	yes		3 4.9362E-08	121.21
ICN(de)ECSDGSFHISK	1652.6923	IPI0051536C	IPI0051536C	yes	no	2,3	7.8087E-05	131.35
ICQN(de)ISKK	989.5328	IPI00126184	IPI00126184	yes	yes		2 0.0008068	144.12
ID(de)IPVNTSIPNVTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no	3,4	1.8626E-35	118.52
IDAPTNIQFVN(de)ETDR	1731.8428	IPI00975193	IPI00975193	yes	no	2,3	2.0949E-24	181.51
IDAPTNIQFVN(de)ETDRTVIVTWTPPR	2882.4927	IPI00975193	IPI00975193	yes	no		3 1.0193E-15	138.04
IDAYNEAAVSIIN(de)SSTR	1822.9061	IPI00380299	IPI00380299	yes	yes	2,3	0.0005193	103.1
IDCYPDEHGASEAN(de)CSAR	2050.8109	IPI00848693	IPI00848693	yes	yes	2,3	1.8457E-08	137.45
IDETDCIGN(de)WTWQEGSQQTIK	2508.1227	IPI00122973	IPI00122973	yes	no		3 1.7027E-40	188.04
IDFIVINE(de)TR	1218.6608	IPI00125813	IPI00125813	yes	no		2 0.0003007	121.68
IDGQWPDGIIASDNTIHFVHPITVN(de)YSGVYVCK	3714.8141	IPI00471187	IPI00471187	yes	no		4 0.0054918	49.525
IDIPVN(de)TSIPNVTEIK	1751.9669	IPI00466371	IPI01026704	no	no	2,3	2.6378E-13	165.58
IDIPVN(de)TSIPNVTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no	3,4	1.8626E-35	118.52
IDIPVNTSIPN(de)VTEIK	1751.9669	IPI00466371	IPI01026704	no	no	2,3	2.6378E-13	165.58
IDIPVNTSIPN(de)VTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no	3,4	1.8626E-35	118.52

IDITDFEKN(de)SSFAQYQSFK	2267.0746	IPI00121312	IPI00121312	yes	yes		2	9.9954E-79	223.36
IDKADGN(de)ITIEGASFVDGDNAATNGVVHIINK	3267.6371	IPI0046760C	IPI0046760C	yes	no		4	0.0035537	59.282
IDKADGNITIEGASFVDGDNAATNGVVHIIN(de)K	3267.6371	IPI0046760C	IPI0046760C	yes	no		4	0.0035537	59.282
IDKGGITINAN(de)ISGDAFIK	1946.0473	IPI0013458E	IPI0013458E	yes	no	2,3		8.2447E-05	119.46
IDPPCTN(de)TTAPSNYINNPYVR	2406.1274	IPI0065853E	IPI0065853E	yes	no	2,3		1.5748E-22	161.08
IDRNPSPEIPQVGN(de)ISIK	2091.096	IPI0030899C	IPI0030899C	yes	yes		3	7.8999E-05	119.8
IDSFN(de)DSTFMIVYTPITPTQR	2546.2363	IPI0032257E	IPI0032257E	yes	no		3	7.0987E-06	103.41
IDSTGN(de)VTNEIR	1317.6525	IPI0022475E	IPI0022475E	yes	yes		2	0.014195	81.565
IDWIGN(de)CSGINDDSYGYR	2103.8956	IPI0012155C	IPI0012155C	yes	yes		2	3.5476E-48	200.39
IEAVIPAEFFEVISSSQN(de)GSYHHIR	2829.4086	IPI0034215E	IPI0034215E	yes	no	3,4		1.2746E-35	175.33
IEAYFSIEGFPAEQN(de)ASNR	2142.0018	IPI0011431E	IPI0011431E	yes	yes	2,3		1.3699E-52	201.37
IEDGFHPDAVAWAN(de)ITNAIR	2209.0916	IPI0016573C	IPI0016573C	yes	no	2,3		2.3073E-14	155.79
IEDRFN(de)STIGPSEEQEK	1977.928	IPI0011551E	IPI0011551E	yes	no	2,3		4.2494E-08	144.73
IEDRFN(de)STIGPSEEQEKNWPGGPR	2799.3212	IPI0011551E	IPI0011551E	yes	no	3,4		1.1645E-11	118.05
IEGITN(de)ETZR	1194.5881	IPI0011929E	IPI0011929E	yes	no		2	0.0012296	113.38
IEGVTMFAMGIEGAN(de)NTQIEDIVSYPSR	3041.4474	IPI0099093E	IPI0099093E	yes	no	3,4		0.0001632	75.71
IEIVPIYDN(de)DSIFVQTDK	2221.1518	IPI0040554E	IPI0040554E	yes	yes	2,3		1.5095E-52	200.58
IEKIEGIIAN(de)VSR	1440.83	IPI0011551E	IPI0011551E	yes	no	2,3		0.0010377	135.02
IEN(de)ISSTESGYTATITR	1841.9007	IPI0011196C	IPI0011196C	yes	no	2,3		1.2653E-21C	300.97
IEN(de)ITGTGTYTHAQQ	1688.8733	IPI0022242E	IPI0022242E	yes	yes	2,3		1.5764E-24	183.23
IEN(de)NCTHGEDTWMECEDPFEIK	2753.1044	IPI0031604E	IPI0031604E	yes	yes		3	2.2777E-39	178.71
IENN(de)CTHGEDTWMECEDPFEIK	2753.1044	IPI0031604E	IPI0031604E	yes	yes		3	2.2777E-39	178.71
IEPEHIQIQN(de)ISQEIAQVATIATK	2801.4923	IPI00165807	IPI00165807	yes	no		3	1.2731E-56	193.87
IETIIN(de)GTDRK	1371.7722	IPI0011906E	IPI0011906E	yes	no		2	0.0015902	113.99
IFFVNP(de)APPYIWPAAHKNEIMINSSIMR	3184.6354	IPI0037869E	IPI0037869E	yes	no		4	0.0001918	88.755
IFIFN(de)QTGIEAK	1379.7449	IPI00378224	IPI00378224	yes	yes		2	3.7853E-15	173.19
IFIFN(de)QTGIEAKK	1507.8399	IPI00378224	IPI00378224	yes	yes		3	0.001135	120.57
IFIGN(de)YSGNVGK	1267.6561	IPI0015341E	IPI0015341E	yes	yes		2	0.0054575	93.011
IFIYSGEPIYIGN(de)ETSIFGPK	2344.1991	IPI00750091	IPI00750091	yes	yes		3	1.5728E-08	126.07
IFNKFAVESIVPSSISIMHSPP(de)DAQNMSEVSISPMEISTFR	4522.2222	IPI00114044	IPI00114044	yes	yes		5	0.025116	39.144
IFTPVSSVFN(de)ITWSEISAIEIK	2543.3887	IPI0065272E	IPI0065272E	yes	no		3	0.0006069	85.248
IGAGSGPIWIDDACNGN(de)ESAIWDCK	2818.2691	IPI0076010E	IPI0076010E	yes	no		3	3.2576E-35	169.19
IGAIN(de)STISNESK	1332.6885	IPI0018735E	IPI0018735E	yes	yes		2	0.032503	74.789
IGAIN(de)STISNESKEAFIDWAR	2321.1652	IPI0018735E	IPI0018735E	yes	yes		3	5.269E-07	117.2
IGAINN(de)SIIIEDR	1539.8621	IPI0011551E	IPI0011551E	yes	no	2,3		4.3453E-07	147.7
IGAINN(de)SIIIEDRIQQISIK	2350.3584	IPI0011551E	IPI0011551E	yes	no		3	0.053594	62.203
IGAINSTISN(de)ESK	1332.6885	IPI0018735E	IPI0018735E	yes	yes		2	0.032503	74.789
IGAINSTISN(de)ESKEAFIDWAR	2321.1652	IPI0018735E	IPI0018735E	yes	yes		3	5.269E-07	117.2
IGGWN(de)ITGPWAK	1298.6772	IPI0039684C	IPI0039684C	yes	no		2	0.0083718	86.911
IGHTN(de)ASIMIFEVK	1558.8177	IPI0085815E	IPI0085815E	yes	yes		3	0.0001558	119.39
IGISFNSITVMEN(de)GSIANVPHIR	2468.2846	IPI0012319E	IPI0012319E	yes	yes	2,3,4		1.4677E-72	214.55
IGN(de)FSEIATHNQTFIK	1818.9264	IPI0085510E	IPI0085510E	yes	no		2	2.9067E-18	171.71
IGN(de)FTIAYSAPKETADNQR	2095.0334	IPI0022919E	IPI0022919E	yes	no	2,3		1.3913E-05	126.25
IGN(de)VTTWISSSNPPVTFAAIYWEEDVSGHK	3401.6568	IPI0022507E	IPI0022507E	yes	no	3,4		6.4678E-16	117.94
IGN(de)WTGEWPETEIVANIWMK	2373.1464	IPI00322497	IPI00322497	yes	yes	2,3,4		1.3618E-94	237.73
IGNFSEIATHN(de)QTFIK	1818.9264	IPI0085510E	IPI0085510E	yes	no		2	2.9067E-18	171.71
IGPGEPIEIIICN(de)VSGAIPPPGR	2242.178	IPI0032134E	IPI0032134E	yes	no	2,3,4		1.3882E-22	158.17
IGTNRSPSVIQEIN(de)VTVVNTMCR	2684.3738	IPI0012230E	IPI0012230E	yes	yes		3	0.0005373	91.583
IGVQMHPGQEIHN(de)FTITGR	2134.0742	IPI0011929E	IPI0011929E	yes	no	2,3,4		3.5981E-09	140.32
IGVTN(de)ASIVIFRPGSVR	1785.0261	IPI0065267E	IPI0065267E	yes	yes	2,3		0.0005286	120.77
IGYDPYANPPNYGNPDPIVIN(de)NTHR	2810.3412	IPI0031643C	IPI0031643C	yes	no	3,4		1.6676E-22	137.72
IHIGNYN(de)GTAGDAIR	1570.7852	IPI00310797	IPI00310797	yes	yes		2	0.0012694	104.95
IHIIPSMNPDGYEVAQAQGN(de)MSGYIVGR	3056.4848	IPI0012826C	IPI0012826C	yes	yes		3	4.409E-120	238.7
IHKDN(de)TTCYEFK	1554.7137	IPI0011906E	IPI0011906E	yes	yes	2,3		0.015264	93.345
IHRIN(de)ASIADIQSK	1564.8685	IPI0011691E	IPI0011691E	yes	no		2	0.0036691	107.74
IHVAQPEN(de)DSHVAIHK	1769.9424	IPI0085041E	IPI0085041E	yes	yes	2,3		2.1767E-34	190.24
IHYIYQNNFITEIPIESFQN(de)ATGIR	3093.5924	IPI0012229E	IPI0012229E	yes	yes	3,4		9.7614E-81	214.35
II(de)DIDSCIDRSNYSVIDITPVAAILPK	3000.5842	IPI0022507E	IPI0022507E	yes	no	3,4		4.4637E-06	103.84
IIASN(de)ITETMR	1247.6544	IPI0013260C	IPI0013260C	yes	no		2	0.00032	136.96
IIASPNEENM(de)TEIISMR	1946.9441	IPI0032257E	IPI0032257E	yes	no	2,3		1.2005E-47	200.97
IIDIPDGYPQISCIPKEEN(de)ATIATYPEFGVIDIK	3932.0169	IPI00124221	IPI00124221	yes	no	3,4,5		2.0261E-05	70.15
IIDQACGTDN(de)QTYASSCHIFATK	2600.1635	IPI00308484	IPI00308484	yes	yes		3	4.8988E-31	168.78
IIFFDSTN(de)ASEGAQPPGKPYPPYSIAK	2876.4232	IPI0045943E	IPI0045943E	yes	yes	3,4		1.3243E-38	177.32
IIGGGDEDAIRPQMQQIIDFETAIAN(de)ITIPQEK	3623.8505	IPI0039684C	IPI0039684C	yes	no	3,4		2.1103E-70	192.18
IIGGGDEDAIRPQMQQIIDFETAIAN(de)ITIPQEK	3779.9516	IPI0039684C	IPI0039684C	yes	no		4	0.017608	47.647
IIGVPSIEDIDEVHNIIPDAIGVIFN(de)DSFSYQIK	3883.0295	IPI0017014E	IPI0017014E	yes	no	3,4		7.0292E-20	119.8
IIGGIPVSGTFHN(de)FSGCISNVFVQR	2818.4589	IPI0011691E	IPI0011691E	yes	no	3,4		2.6233E-10	116.21
IIIN(de)FTSMDIYR	1484.7697	IPI0012518E	IPI0012518E	yes	no		2	0.0007915	123.64
IIIN(de)WTQGQTSQVIR	1684.9261	IPI0067465E	IPI0067465E	yes	no		2	0.0001976	120.63
IIISPEEN(de)VTITCTAENQUIER	2429.2108	IPI0012137E	IPI0012137E	yes	no	2,3		2.9277E-13	252.83
IIISPSAFHDGN(de)FSIIIR	1999.0891	IPI0031051E	IPI0031051E	yes	no		3	6.9549E-06	129.93
IIITAAPN(de)ITTSAPFR	1684.9512	IPI0031472E	IPI0031472E	yes	yes		3	0.0052257	81.311
IIITAAPN(de)ITTSAPFRYDIIDVTR	2660.4538	IPI0031472E	IPI0031472E	yes	yes		3	0.0016297	85.146
IIN(de)ASVIGDHTK	1266.6932	IPI0011605E	IPI0011605E	yes	yes		3	0.017444	79.089
IIN(de)ATHQIGCQSSISGDTGVIHVVEKEEDIK	3376.6933	IPI00118674	IPI00118674	yes	yes	4,5		6.3374E-11	109.68
IIN(de)HSIIHK	1186.7186	IPI0040660E	IPI0040660E	yes	yes	2,3		3.2283E-11	167.12
IIN(de)ITFIDITR	1317.7656	IPI0034356E	IPI0034356E	yes	no		2	0.0004106	117.79
IIN(de)ITNPVINQEIEAFSPEDASSSR	2890.4349	IPI00221444	IPI00221444	yes	no		3	1.4088E-35	171.75
IIN(de)QTADMIQIASK	1544.8232	IPI00126864	IPI00126864	yes	no		3	0.010327	80.746
IIN(de)QTIR	856.51305	IPI0046006E	IPI0046006E	yes	no		2	0.017481	101.64
IIN(de)QTIRENIK	1340.7776	IPI0046006E	IPI0046006E	yes	no		2	1.6485E-09	163.12
IIN(de)TTDVYIIPSINPDGFER	2276.1689	IPI0013057E	IPI0013057E	yes	yes	2,3		1.0228E-09	142.99
IINDYVSN(de)QTQGMK	1722.8611	IPI0013563E	IPI0013563E	yes	no		2	0.0017385	100.58
IINKFN(de)SSSSSIEEK	1681.8523	IPI00338561	IPI00338561	yes	yes		2	0.016228	87.566
IIPAFN(de)TTSIGIPYPR	1645.8828	IPI0012767E	IPI0012767E	yes	no		3	0.017906	72.681
IIPGGN(de)TSFDVVFAR	1704.9199	IPI0011833E	IPI0011833E	yes	yes		3	0.0009187	102.28



IIPHIEKPIQN(de)FTICFR	2125.1507	IPI00309214	IPI00309214	yes	yes	2,3,4	0.0008784	115.87
IQQQSN(de)QSSQFIHSVER	2128.0661	IPI00876541	IPI00876541	yes	no		2 1.979E-48	204.23
IQTAEHN(de)ISGAER	1537.7849	IPI0040393E	IPI0040393E	yes	no	2,3	1.7886E-13E	262.42
IQVVYIHSNN(de)ITK	1640.925	IPI00123194	IPI00123194	yes	yes	2,3	3.4828E-16	171.81
IIRVDIPQQPMGIIAVAN(de)DTNSCEISPCR	3266.621	IPI0011906E	IPI0011906E	yes	yes		3 1.9387E-51	186.44
IIRVDIPQQPMGIIAVAN(de)DTNSCEISPCR	3266.621	IPI0011906E	IPI0011906E	yes	yes		3 1.9387E-51	186.44
IISQAPSTPSPNMFTINN(de)ETGDIITVAAGIDR	3342.6766	IPI00323134	IPI00323134	yes	no	3,4	2.1395E-07	90.616
IISQAPSTPSPNMFTINN(de)ETGDIITVAAGIDREK	3599.8141	IPI00323134	IPI00323134	yes	no	3,4,5	9.5466E-23	131.62
IISYN(de)VSCSINEETQSVIEIFDPQHR	3077.4764	IPI0011929E	IPI0011929E	yes	no		3 1.0828E-13	129.43
IITHTIEGPSQN(de)VTHIQPWQDPESWER	3414.7208	IPI0047319C	IPI0047319C	yes	no	3,4	2.9488E-09	108.44
IITN(de)NSQTPPIISPQEVVSCSPYAQGCDGGFPYIIAGK	3980.9288	IPI0013001E	IPI0013001E	yes	yes		4 1.3871E-26	131.68
IYY(de)EGGDIPDFRKENSYSYQVINWR	2898.4301	IPI0015331E	IPI0015331E	yes	yes	3,4	0.010946	87.654
IYFGYSIIGAHPiin(de)QTVNR	2388.2954	IPI0022181E	IPI0022181E	yes	yes		3 0.0040205	73.928
IYGIEN(de)TTQEIK	1520.8086	IPI0030999E	IPI0030999E	no	no		2 0.0004353	132.97
IYIN(de)VSNNIIQIPAGIPR	2107.2154	IPI00884541	IPI00884541	yes	yes		3 3.3853E-09	140.96
IYISAEDFSIDHSPN(de)STAGPSCSIIQEAFR	3424.6245	IPI0011553C	IPI0011553C	yes	yes	3,4	6.014E-49	170.59
IYISAEDFSIDHSPN(de)STAGPSCSIIQEAFR	3580.7256	IPI0011553C	IPI0011553C	yes	yes	3,4	6.6853E-06	80.132
IK(de)FIEAGIYEVPIITDSGNPPKSNISIIR	3296.8384	IPI00323134	IPI00323134	yes	no	3,4,5	1.271E-22	143.91
IKEQVVGIIAQN(de)NCSCESK	2176.0616	IPI0012259E	IPI0012259E	yes	yes		3 1.9753E-41	195.46
IKEQVVGIIAQNN(de)CSCESK	2176.0616	IPI0012259E	IPI0012259E	yes	yes		3 1.9753E-41	195.46
IKGEAEYQEIRNPN(de)GTVTVISR	2473.2925	IPI0031140E	IPI0031140E	yes	yes	3,4	0.0009807	90.718
IKIDN(de)YSTQEIGR	1535.7944	IPI00122257	IPI00122257	yes	no	2,3	9.7217E-22	179.67
IKN(de)ATVTQYQIK	1405.7929	IPI00221547	IPI00221547	yes	no	2,3	0.0009637	138.99
IKN(de)TTNQIAIK	1355.8136	IPI0098598E	IPI0098598E	yes	no	2,3	0.0002399	145.31
IKVSEGDYSIYMSN(de)ITK	1946.9659	IPI0012964E	IPI0012964E	yes	no		3 2.1584E-05	134.25
IKVSN(de)VSCEASVSK	1506.7712	IPI0013556C	IPI0013556C	yes	no		3 0.0048711	105.03
IMESHPN(de)GTFSAK	1417.666	IPI0046805E	IPI0046805E	yes	no	2,3	0.0001135	143.31
IMNAPIYIAEWQN(de)ITK	1903.9866	IPI0093088E	IPI0093088E	yes	no		3 4.214E-07	139.58
IMQDPIQQAEGIYCN(de)R	1934.8979	IPI0031454E	IPI0031454E	yes	yes	2,3	2.9722E-09	150.05
IN(de)ETHIFNGSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	1.2068E-21	174.59
IN(de)GTDPIVAADSK	1299.667	IPI0011906E	IPI0011906E	yes	yes		2 0.0070781	85.909
IN(de)GTDPIVAADSKR	1455.7682	IPI0011906E	IPI0011906E	yes	yes	2,3	0.0084744	92.039
IN(de)HCKFDEFFSQGCAPGYEKNSTICDICIGPIK	3904.7681	IPI0013978E	IPI0013978E	yes	no		4 2.0546E-29	141.36
IN(de)ISEGEVAATVK	1329.714	IPI0045800E	IPI0045800E	yes	yes		2 3.885E-05	146
IN(de)ITAAQISQIEGIIQAR	1938.0898	IPI0011551E	IPI0011551E	yes	no	2,3	6.704E-107	165.3
IN(de)ITEEEKIINR	1470.8042	IPI00320204	IPI00320204	yes	yes		2 3.5706E-08	157.56
IN(de)ITEEEKIINRR	1626.9053	IPI00320204	IPI00320204	yes	yes		2 0.002835	112.51
IN(de)KTVAIHTIDPEK	1577.8777	IPI00323624	IPI00323624	yes	no		2 0.0026475	110.55
IN(de)KTVAIHTIDPEKIGQGGVQK	2345.3067	IPI00323624	IPI00323624	yes	no		3 0.052232	61.767
IN(de)MTIPDAIVPTFSISNHSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3,4	4.2671E-48	189.55
IN(de)TTSDEKPTNPFR	1733.822	IPI00131881	IPI00131881	yes	no	2,3	0.002569	109.07
IN(de)TTSDEKPTNPFRFPNIGVEK	2618.2976	IPI00131881	IPI00131881	yes	no		3 0.0015938	87.352
IN(de)VSYTGERPSSNMVIVDVK	2207.1256	IPI0062466E	IPI0062466E	yes	yes	2,3	0.0040801	83.758
IN(de)VTEYVDKIK	1320.7289	IPI0022507E	IPI0022507E	yes	no		3 0.0015193	122.7
IN(de)YTIVGEPIR	1273.703	IPI00120674	IPI00120674	yes	no		2 0.0004494	132.79
INETHIFN(de)GSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	1.2068E-21	174.59
INIDGSN(de)YTIK	1349.7191	IPI0011906E	IPI0011906E	yes	yes		2 0.011616	83.53
INMTIPDAIVPTFSISN(de)HSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3,4	4.2671E-48	189.55
INN(de)ITNIGPIDMK	1441.7599	IPI0033068C	IPI0033068C	yes	no	2,3	0.0005987	114.74
INNGGCQDICIITHQGHVN(de)CSCR	2712.1737	IPI0011906E	IPI0011906E	yes	yes		3 1.1702E-07	106.49
INSAPVEGYSEHVGN(de)K	1699.8166	IPI0034983C	IPI0034983C	yes	no	2,3	3.1075E-13	163.41
IPEN(de)QTIPGEIPEHAGPAEGVHDSR	2649.2783	IPI00856221	IPI00856221	yes	yes		3 0.0006721	79.69
IPFNVIMNNVEDIIEQQTFN(de)DTVSPR	3032.4913	IPI0031004E	IPI0031004E	yes	yes	3,4	0.00117	71.052
IPN(de)ISIDVIQPSFPEIIIESHMVMIR	2990.5973	IPI0022166E	IPI0022166E	yes	no		3 0.0002123	85.248
IPNNTQWITW(de)SPEGHK	1906.9326	IPI0012581E	IPI0012581E	yes	no	2,3	4.7183E-05	126.77
IPQIHHYIN(de)ASDWER	2005.9759	IPI00666034	IPI00666034	yes	no		2 0.0007162	107.5
IPSSIEN(de)ATSISIMNITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes		3 9.1324E-40	129.35
IPSSIENATSISIMN(de)ITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes		3 9.1324E-40	129.35
IPVAVIN(de)ATAK	1095.6652	IPI00122491	IPI00122491	yes	yes		2 0.009307	88.187
IPYQGN(de)ATMIVVIMEK	1805.942	IPI0015325E	IPI0015325E	yes	yes	2,3	5.3412E-10	155.98
IQCVDGN(de)WTTIPVCIEEER	2318.0671	IPI0013001C	IPI0013001C	yes	no		2 2.8156E-65	214.59
IQCVDGN(de)WTTIPVCIEEERTCGDIPEIEHGSAK	3812.7444	IPI0013001C	IPI0013001C	yes	no		4 7.7114E-05	69.952
IQDFIVDN(de)ETFSGFIQHNISIPR	2689.35	IPI00112614	IPI00112614	yes	yes	3,4	6.1992E-24	167.24
IQDFIVDNETFSGFIQHN(de)ISIPR	2689.35	IPI00112614	IPI00112614	yes	yes	3,4	6.1992E-24	167.24
IQDIEITGSPVSN(de)ISAHIFSNISIEK	2898.4975	IPI0011952E	IPI0011952E	yes	yes	2,3,4	4.8906E-30	159.76
IQDIEITGSPVSNISAHIFSN(de)ISSIEK	2898.4975	IPI0011952E	IPI0011952E	yes	yes	2,3,4	4.8906E-30	159.76
IQFDDN(de)GTYTCQVK	1687.7512	IPI0011647E	IPI0011647E	yes	no		2 0.0010697	109.35
IQIEFRPIDIN(de)STAAGIPR	2110.1535	IPI0011551C	IPI0011551C	yes	yes	2,3	8.7668E-09	141.6
IQNIIEKPSVTTVYINN(de)GSVIQSSVATIYDRK	3693.9578	IPI00310567	IPI00310567	yes	yes		4 0.0022124	55.587
IQQEFHCCGSN(de)NSQDWQDSEWIR	2923.2038	IPI0026642E	IPI0026642E	yes	yes		3 0.0016243	76.015
IQSPIFIIDANANIQN(de)VTTSGNK	2457.2864	IPI00666034	IPI00666034	yes	no		3 2.6959E-17	154.84
IQSPIFIIDANANIQN(de)VTTSGNKAIEIVASVTAK	3426.8358	IPI00666034	IPI00666034	yes	no		4 7.558E-16	119.37
IQTPIN(de)YTEFQKPICIPSK	2276.1875	IPI00113057	IPI00113057	yes	yes	2,3,4	1.9449E-13	153.74
IQVTIYN(de)CSFGR	1456.7133	IPI0040574E	IPI0040574E	yes	no		2 0.0001583	143.42
IRAEQITIHAIGIGEAN(de)KTQIR	2431.3659	IPI0099093E	IPI0099093E	yes	no		3 5.3143E-05	100.21
IRDYEEN(de)SSSCHKEVQIIK	2334.1274	IPI00330594	IPI00330594	yes	yes		3 0.0001094	118.21
IRN(de)ATITQAITNK	1442.8205	IPI0087602E	IPI0087602E	yes	yes		3 0.01562	90.793
IRN(de)SSIGGVINK	1256.7201	IPI0031467E	IPI0031467E	yes	yes	2,3	0.000456	143.42
IRN(de)SSIGGVINKYDVVIR	2002.1324	IPI0031467E	IPI0031467E	yes	yes		3 5.0377E-05	126.16
IRNPCTSE(de)QNCTSPFSYK	2187.9677	IPI00132474	IPI00132474	yes	yes	2,3	3.2634E-37	193.8
IRPHFISVCDPDFSQIN(de)CSEGYIQNYR	3314.5237	IPI0011562E	IPI0011562E	yes	yes	3,4	8.3463E-11E	234.36
IRPIFN(de)K	886.53887	IPI00108844	IPI00108844	yes	yes		3 0.060546	100.07
IRPIFN(de)KSFEVTVGQSDTYSYIFR	2911.4505	IPI00108844	IPI00108844	yes	yes	3,4	5.0341E-21	156.05
IRVN(de)GTKEPIEFK	1529.8566	IPI0034511E	IPI0034511E	yes	no	2,3	0.0046252	106.67
IS(de)HYKQNFSSFCR	1585.746	IPI0038130E	IPI0038130E	yes	yes		2 0.0029559	110.92
ISAIIDNIIN(de)HSSIFIK	1783.9832	IPI0012334E	IPI0012334E	yes	yes	2,3	2.515E-119	252.47

ISASGAEIEAIEAQVIN(de)ISIK	2155.1736	IPI00312711	IPI00312711	yes	no	2,3	1.2564E-100	233.63
ISCAFKTEN(de)QTR	1453.6984	IPI00120245	IPI00120245	yes	no		2 5.3225E-15	175.74
ISDTN(de)ITAIPQGIPTSITEVHIDGNK	2733.4185	IPI00123196	IPI00123196	yes	yes		3 1.3928E-22	157.3
ISDTN(de)ITAIPQGIPTSITEVHIDGNKITK	3075.6452	IPI00123196	IPI00123196	yes	yes	3,4	1.8351E-05	95.123
ISDTN(de)ITAIPQGIPTSITEVHIDGNKTKVDAPSIIK	3786.0415	IPI00123196	IPI00123196	yes	yes		4 0.0002326	63.203
ISEEFIKN(de)ISASAR	1563.8257	IPI0089497C	IPI0089497C	yes	no		2 0.0003654	124.16
ISEGN(de)RTITIINVTR	1685.9424	IPI00108535	IPI00108535	yes	no		2 0.0006223	107.35
ISEGN(de)RTITIINVTRNDTGPYVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4	0.0034858	76.049
ISEGNR(de)TITIINVTR	1685.9424	IPI00108535	IPI00108535	yes	no		2 0.0006223	107.35
ISEGNR(de)TITIINVTRNDTGPYVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4	0.0034858	76.049
ISEGNRTITI(de)INVTRNDTGPYVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4	0.0034858	76.049
ISEN(de)GSSVAGIISPMEK	1918.9306	IPI0039979E	IPI0039979E	yes	no	2,3	1.0578E-19	162.32
ISFIIGSDSTHVIPGESPFN(de)K	2244.1426	IPI00123783	IPI00123783	yes	no		3 0.0093786	67.645
ISGKPTN(de)VSVSVMSEGDGICY	2312.1028	IPI0047388C	IPI0047388C	yes	no		2 1.2385E-85	223.18
ISGNSIHN(de)ASIPHEIAYGSVITVK	2506.318	IPI0022166E	IPI0022166E	yes	no		3 8.3948E-21	152.06
ISHDGN(de)ETIPIHIYVK	1834.9577	IPI00405742	IPI00405742	yes	no	2,3,4	4.9188E-46	208.15
ISHYN(de)DTYPISPQR	1786.8638	IPI0011303E	IPI0011303E	yes	no	2,3	9.8476E-12	158.29
ISIN(de)ESMQVVS	1361.6973	IPI00471022	IPI00471022	yes	yes		2 0.0096606	84.753
ISISEN(de)YTISIANAK	1622.8516	IPI0012137E	IPI0012137E	yes	no	2,3	1.2107E-56	216
ISITN(de)ETFRK	1207.6561	IPI00123652	IPI00123652	yes	no		2 0.0011586	115.57
ISN(de)ITIIEMEKESAR	1845.987	IPI00356462	IPI00356462	yes	no		2 0.0005434	123.08
ISN(de)VTPEDAGTYVCVK	1815.8349	IPI0012915E	IPI0012915E	yes	no		2 8.54E-06	135.23
ISNISN(de)ISHDIVQEATDHAYNIQQADEISR	3509.6659	IPI0022344E	IPI0022344E	yes	yes		3 6.7833E-59	179.47
ISPGGAEMFQVQDMVVSQEKGN(de)CSIQR	2994.3998	IPI00130117	IPI00130117	yes	no		4 9.5119E-06	100.19
ISPIHAIIN(de)FSIDPK	1663.9297	IPI0011597E	IPI0011597E	yes	yes	2,3	5.3454E-08	148.72
ISQAIGN(de)ITVVQK	1369.7929	IPI00112032	IPI00112032	yes	no	2,3	4.8043E-15	167.89
ISQKN(de)QTVFER	1348.7099	IPI00130117	IPI00130117	yes	no	2,3	0.0043971	105.46
ISQN(de)ASIGPHVRPIPIQYEDK	2361.2441	IPI0011694E	IPI0011694E	yes	no		3 0.040348	63.998
ISQN(de)ASIGPHVRPIPIQYEDKEVEPGTICDVAGWGVVTHAGR	4552.2921	IPI0011694E	IPI0011694E	yes	no	4,5	6.9592E-16	95.36
ISSPN(de)VTISCK	1291.6442	IPI0022571E	IPI0022571E	yes	no		2 0.0090198	85.554
ISTNI(de)TIVCKPGDIESAPVIR	2282.2304	IPI00308971	IPI00308971	yes	yes		2 7.7591E-59	202.22
ISTSPFAINI(de)TMIPK	1631.8957	IPI00666034	IPI00666034	yes	no	2,3	1.3904E-33	194.98
ISVPDGIKVSND(de)SSAR	1528.8209	IPI00120761	IPI00120761	yes	no		2 0.0002387	125.22
ISWPSNVN(de)GSHR	1352.6585	IPI0012270E	IPI0012270E	yes	no		2 0.010779	84.169
ITAN(de)STWQPDKAK	1458.7467	IPI0065367E	IPI0065367E	yes	no		2 0.0023345	129.77
ITATDGENFATPIYIN(de)ITVAASR	2437.2489	IPI00623114	IPI00623114	yes	no		3 1.0804E-13	146.97
ITCFNN(de)FSIAAPESPHPAHSQVSTGYSR	3260.5309	IPI0012554E	IPI0012554E	yes	no	3,4	8.2463E-06	92.41
ITDIEN(de)GTFANIPR	1559.7944	IPI00117957	IPI00117957	yes	yes		2 7.071E-43	202.25
ITDTICGVGN(de)MSANASDQER	2137.9368	IPI0011406E	IPI0011406E	yes	no		3 0.0078466	70.837
ITDTICGVGNMSAN(de)ASDQER	2137.9368	IPI0011406E	IPI0011406E	yes	no		3 0.0078466	70.837
ITEFTHN(de)STMDYK	1585.7083	IPI0013001C	IPI0013001C	yes	no	2,3	0.0005799	122.78
ITFFNSTIN(de)TSGIVAQGEAIPGHRPGIVTK	3405.8409	IPI00153317	IPI00153317	yes	yes	3,4	3.0402E-16	125.52
ITHIPDDIPSN(de)ITVINITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes	3,4	7.0493E-17	153.25
ITHIPDDIPSNITVIN(de)ITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes	3,4	7.0493E-17	153.25
ITIAIN(de)NTITPHTIPPPTIVYK	2376.3417	IPI0030923C	IPI0030923C	yes	no	2,3	1.4753E-134	254.26
ITIEVDPVPKPSIEIN(de)KTEASTDSCHIR	3295.6758	IPI0010994E	IPI0010994E	yes	yes		4 0.0094503	58.938
ITN(de)ISIAMSGVYVCK	1654.8422	IPI00126827	IPI00126827	yes	no		2 1.8169E-17	173.51
ITN(de)QTIGFSFAVEQDIPVK	2106.0997	IPI00624663	IPI00624663	yes	yes	2,3	8.87E-111	249.52
ITN(de)QTIGFSFAVEQDIPVKNIKPAPIK	2967.6433	IPI00624663	IPI00624663	yes	yes		4 0.037238	45.878
ITN(de)VTFTGVTNIHGDMDK	2158.0729	IPI00123783	IPI00123783	yes	no		3 7.7876E-07	117.3
ITPNCCN(de)TSTVADAYR	1841.8036	IPI0011122E	IPI0011122E	yes	yes		2 0.0010308	99.663
ITQN(de)ITDIIVNVSDSIEMR	2160.1096	IPI00273133	IPI00273133	yes	yes		3 0.0011961	85.636
ITQNITDIIVN(de)VSDSIEMR	2160.1096	IPI00273133	IPI00273133	yes	yes		3 0.0011961	85.636
ITSCATN(de)ASMCGDEAR	1742.7022	IPI00119063	IPI00119063	yes	yes	2,3	4.4654E-45	200.33
ITSFMIEN(de)GTSDCNIPENPIFISCDGR	3086.3784	IPI0022571E	IPI0022571E	yes	yes		3 0.0002149	78.976
ITSFMIEN(de)GTSDCNIPENPIFISCDGRNHTISGSK	3910.7924	IPI0022571E	IPI0022571E	yes	yes		4 4.9772E-08	80.067
ITSFMIENGTSDCNIPENPIFISCDGRN(de)HTISGSK	3910.7924	IPI0022571E	IPI0022571E	yes	yes		4 4.9772E-08	80.067
ITSN(de)ATSDINIK	1275.667	IPI00461493	IPI00461493	yes	no		2 0.0031372	99.531
ITTTPTNGQQGTSIEVVHADQSSCTFENINPGIEYN(de)VSVYTVI	4827.2821	IPI00975193	IPI00975193	yes	no	4,5	4.0624E-08	68.916
ITTTSPWMIPAPHVWPEDHVFISTPNFN(de)YTVQDFER	4272.0415	IPI0013350C	IPI0013350C	yes	yes	4,5	0.0001177	61.725
ITVIDANDNAPAFN(de)QSIYR	2121.0491	IPI00129613	IPI00129613	yes	yes	2,3	1.9518E-12E	259.64
ITVPSSQN(de)SSFR	1321.6626	IPI0051536C	IPI0051536C	yes	no		2 0.015343	80.69
ITVVYAEN(de)GTVIQGTTVASVYK	2312.2264	IPI0031735E	IPI0031735E	yes	yes	2,3	4.3586E-25C	311.65
ITYESGFN(de)YSK	1420.6874	IPI00666034	IPI00666034	yes	no		2 1.553E-06	154.36
ITYN(de)ESR	881.4243	IPI01008227	IPI01008227	yes	no		2 0.023094	99.139
IVAIAVIDEKN(de)TSIEHTR	2008.0953	IPI0045379E	IPI0045379E	yes	yes		3 1.6498E-18	136.39
IVAN(de)ISGCAAVNSETIMCCIR	2338.0902	IPI0022248E	IPI0022248E	yes	yes		3 2.7468E-76	204.23
IVCTQKKEN(de)ESR	1490.7511	IPI0031515E	IPI0031515E	yes	no	2,3	0.0043827	107.06
IVDTN(de)KTR	945.52434	IPI0087655E	IPI0087655E	yes	no		2 2.7257E-06	156.35
IVDVN(de)ITSEGK	1173.6241	IPI0011352E	IPI0011352E	yes	no		2 0.0019443	104.24
IVDVN(de)ITSEGKVK	1400.7875	IPI0011352E	IPI0011352E	yes	no		2 0.029883	82.85
IVEDIESFIKPYSVEEQKN(de)ITSCPDGAPFIQHGPDYR	4278.0579	IPI00124221	IPI00124221	yes	yes	4,5	7.6544E-15	107.95
IVGCPPGGAGGN(de)DTEIACIR	2126.0249	IPI00128567	IPI00128567	yes	yes		3 0.013236	64.298
IVGGTN(de)ASIGEPWQVSIQVK	2268.1903	IPI00113057	IPI00113057	yes	yes	2,3	6.6671E-49	196.4
IVGSPFIGTGVN(de)K	1489.7963	IPI0013480E	IPI0013480E	yes	no	2,3	6.4695E-55	210.38
IVICQPGTEAEVTDEIMDTDVNCVPCPKGHFN(de)TSSPR	4300.9497	IPI0011642E	IPI0011642E	yes	yes		4 2.1909E-08	79.286
IVIDPSGSMNIYVIDGSDSIGSSN(de)FTGAK	3056.5012	IPI0011406E	IPI0011406E	yes	no		3 3.991E-05	80.355
IVIDPSGSMNIYVIDGSDSIGSSN(de)FTGAKR	3212.6023	IPI0011406E	IPI0011406E	yes	no		4 0.0001237	67.778
IVIIDPAISN(de)NSFSSNPYGPYDR	2651.3231	IPI00848693	IPI00848693	yes	yes	3,4	1.4815E-08	111.57
IVIQNG(de)AHEVFNHK	1604.8423	IPI00134704	IPI00134704	yes	yes		3 0.019958	73.881
IVIWTAEEQGGIGASQYIEIHKAN(de)ISK	3004.5294	IPI0012605C	IPI0012605C	yes	no	3,4	6.7981E-09	113.51
IVYIEHNIEN(de)STK	1799.9781	IPI0032119C	IPI0032119C	yes	no	2,3,4	2.1917E-11	160.47
IVYIEHNIEN(de)STKEEIIAAIEK	2796.5273	IPI0032119C	IPI0032119C	yes	no	2,3,4	2.0219E-10E	230.71
IVKIPSGTIVISN(de)ATEGDGGIYR	2359.2747	IPI0012915E	IPI0012915E	yes	no		3 8.2875E-31	172.66
IVN(de)GSGPHQGR	1120.5738	IPI0032202E	IPI0032202E	yes	yes		2 0.016738	81.525
IVPCEFGVIYPIAEN(de)FSR	2110.0557	IPI0012190E	IPI0012190E	yes	no	2,3	0.0001263	111.33



IVPIENGEIVVSIVNGRPGAIN(de)FSYSPIIR	3222.7765	IPI00116913	IPI00116913	yes	yes		3	0.018203	54.3
IVQAQYWHDPKESVYRN(de)YSIFIADINQER	3694.8532	IPI00331318	IPI00331318	yes	no	3,4		8.7472E-05	84.404
IVQDVAN(de)NTNEEAGDGTATVIAR	2559.2413	IPI00308885	IPI00308885	yes	no		3	0.0013663	74.251
IVSN(de)ASCTTNCIAPIAK	1818.8968	IPI00850337	IPI00850337	yes	no		2	2.7833E-09	146.81
IVTQTIPCN(de)K	1172.6223	IPI00307966	IPI00307966	yes	yes		2	1.0316E-31	196.27
IVTQTIPCN(de)KTIFWSK	1935.0288	IPI00307966	IPI00307966	yes	yes		2	5.0554E-25	179.81
IVVN(de)VSDKNDHAPWFTSPSYDGR	2603.2405	IPI00623114	IPI00623114	yes	no		3	0.0089119	72.145
IVVPINNREN(de)ISDPTSPIR	2133.1542	IPI00136925	IPI00136925	yes	no		2	1.6279E-08	140.89
IVVPINNREN(de)ISDPTSPIRR	2289.2553	IPI00136925	IPI00136925	yes	no		3	2.7087E-05	124.46
IVYN(de)HSSGR	1031.5148	IPI00133500	IPI00133500	yes	yes		2	0.013288	101.65
IWDPSSHPIQN(de)ISR	1705.8536	IPI00338209	IPI00338209	yes	no	2,3		8.9377E-12	159.18
IWIPVN(de)ITWADIEDK	1811.9458	IPI00126253	IPI00126253	yes	no		3	6.0864E-05	126.1
IWIPVN(de)ITWADIEDKDGR	2140.0953	IPI00126253	IPI00126253	yes	no	2,3		9.5323E-21	169.09
IWVHNGAPVN(de)ASASCR	1737.8369	IPI00464135	IPI00464135	yes	yes	2,3		0.0009048	113.59
IWVN(de)SSDGISPVIK	1570.8355	IPI00848693	IPI00848693	yes	yes	2,3		6.0881E-34	197.17
IYAGMVSIMDEAVGNV(de)TK	1896.9325	IPI00652358	IPI00652358	yes	no	2,3		1.5425E-21	172.97
IYN(de)VTHQFCNASVMDPTCVR	2411.0821	IPI00132600	IPI00132600	yes	no	2,3		1.5365E-42	195.77
IYNVTHQFCN(de)ASVMDPTCVR	2411.0821	IPI00132600	IPI00132600	yes	no	2,3		1.5365E-42	195.77
IYPIEN(de)ITIAPDPHPDSIPPVAYNPWMDIR	3542.7908	IPI01023131	IPI01023131	yes	no	3,4		0.0005101	61.911
IYSDQCHHN(de)ISIIPPTEIVCNR	2762.3269	IPI00123442	IPI00123442	yes	yes		3	0.0009842	85.35
IYSDQCHHNISIPPTEIVCN(de)R	2762.3269	IPI00123442	IPI00123442	yes	yes		3	0.0009842	85.35
IYVIDGTQN(de)DTAFVFR	1954.9789	IPI00308658	IPI00308658	yes	no		3	2.7878E-08	142.45
IYWISSGN(de)HTINR	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		5.9678E-42	202.29
IYWISSGNHTIN(de)R	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		5.9678E-42	202.29
IYWTDGDN(de)ISMANMDGSNHTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes		3	4.5794E-20	146.06
IYWTDGDNISMANMDGSN(de)HTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes		3	4.5794E-20	146.06
KAFITN(de)FSMIIDGVTYPGVVK	2299.2286	IPI00312711	IPI00312711	yes	no	2,3,4		1.9277E-16	155.03
KAFITN(de)FSMIIDGVTYPGVVKEK	2556.3662	IPI00312711	IPI00312711	yes	no	3,4,5		9.0579E-40	185.61
KAWGISVINPN(de)KTK	1554.8882	IPI00989096	IPI00989096	yes	yes	2,3		0.0001236	138.01
KCEAN(de)ITISSPAR	1445.7297	IPI00894972	IPI00894972	yes	no		2	0.012604	88.282
KCIQIQAIN(de)MSSCPIDSR	2120.0177	IPI00648288	IPI00648288	yes	no		3	0.000503	99.055
KCNSDN(de)ISYVIHCEPENNTK	2421.0689	IPI00323053	IPI00323053	yes	no		3	2.685E-05	122.44
KCNSDNISYVIHCEPEN(de)NTK	2421.0689	IPI00323053	IPI00323053	yes	no		3	2.685E-05	122.44
KCPN(de)CTETAVNGEIVVMYDVRNREEK	2954.3572	IPI00970438	IPI00970438	yes	no	3,4		0.0006553	90.464
KCQEAIN(de)ATCK	1321.6119	IPI00314443	IPI00314443	yes	no	2,3		0.012042	93.839
KDGSQDFN(de)ETWENYEK	1988.8388	IPI00128206	IPI00128206	yes	yes		2	7.4495E-09	148.52
KDTCAQECSHFN(de)ITK	1837.8087	IPI00132474	IPI00132474	yes	no	2,3		2.0031E-11	158.17
KEDSCQIN(de)YSEGPCIGMQR	2400.0144	IPI00127352	IPI00127352	yes	yes	2,3		5.5189E-33	183.56
KEN(de)SSEICSNNGECVCGQCVCVR	2646.0349	IPI00132474	IPI00132474	yes	no	3,4		8.1454E-59	198.96
KEN(de)SSYQVINWR	1522.7528	IPI00153316	IPI00153316	yes	yes		3	0.0005041	141.1
KENG(de)VFEIISNSSGR	1651.7802	IPI00757771	IPI00757771	yes	no		3	0.01607	84.566
KENGVFEEISNS(de)SGR	1651.7802	IPI00757771	IPI00757771	yes	no		3	0.01607	84.566
KEQETCIAPEIEHGN(de)YSTTQR	2490.1445	IPI00122117	IPI00122117	yes	yes		3	2.9769E-30	171
KEVHFFVNA(de)SDVDSVK	1819.9105	IPI00310049	IPI00310049	yes	yes		3	9.4799E-05	126.77
KFHVN(de)YTQPIVAVK	1642.9195	IPI00123704	IPI00123704	yes	no		2	6.0188E-05	139.86
KFPVPFQKEN(de)VTATIVEIGR	2272.258	IPI00134691	IPI00134691	yes	yes	2,3,4		1.5033E-61	176.94
KGCADYCN(de)QTITK	1557.6916	IPI00987265	IPI00987265	yes	no	2,3		5.2235E-06	149.69
KGIVSGGVYNHSHVGCIPYTIPTCEHHVN(de)GSRPPCTGEGDTPF	4558.1329	IPI00113517	IPI00113517	yes	yes		5	0.0018523	52.931
KGN(de)NTINPFIIIPSASDVPTGCPNQWWPYAGHCYR	3916.8202	IPI00126186	IPI00126186	yes	yes		4	3.9711E-05	68.942
KGQNMVCGMGCDN(de)DSIVQQIFNAEIDTYTR	3591.5851	IPI00132600	IPI00132600	yes	no	3,4,5		4.0397E-59	184.03
KGYW(de)ASYNIPFHKTINWSGYPIIVHK	3281.6815	IPI00471081	IPI00471081	yes	yes		5	0.023579	55.734
KIDFIVIN(de)ETR	1346.7558	IPI00125813	IPI00125813	yes	no	2,3		0.000401	121.04
KIDNEVIQIISGN(de)ATITIAMR	2412.341	IPI00126834	IPI00126834	yes	no		3	3.638E-23	166.57
KIIASPNEEN(de)MTEIISMR	2075.0391	IPI00322575	IPI00322575	yes	no	2,3		2.5698E-37	191.93
KIN(de)ASIVTSFVEIPIVSNVSIR	2385.3631	IPI00323857	IPI00323857	yes	no	2,3,4		1.9439E-39	186.06
KIN(de)CSQEVPGSSQCDREPEPR	2472.1122	IPI00881836	IPI00881836	yes	yes		3	0.0097365	75.239
KIN(de)TTNGKSDFQVPCQYSQQIK	2583.2751	IPI00126188	IPI00126188	yes	yes		3	3.9604E-07	116.6
KINASIVTSFVEIPIVSN(de)VSIR	2385.3631	IPI00323857	IPI00323857	yes	no	2,3,4		1.9439E-39	186.06
KINIDGS(de)NYTIK	1477.814	IPI00119063	IPI00119063	yes	yes	2,3		0.0007241	135.02
KIPIN(de)FTEGAR	1244.6877	IPI00129243	IPI00129243	yes	no		2	0.014254	91.961
KIQIN(de)NSENTIR	1428.7685	IPI00223446	IPI00223446	yes	yes		2	0.0077503	96.82
KISTN(de)ITIVCKPGDIESAPVIR	2410.3254	IPI00308971	IPI00308971	yes	yes	3,4		0.0004195	93.92
KISTSPFAIN(de)ITMIPK	1759.9906	IPI00666034	IPI00666034	yes	no		3	4.6424E-05	131.86
KITN(de)ITEAISDIPR	1569.8726	IPI00342691	IPI00342691	yes	yes		3	0.0001967	128.31
KIVIDPSGSMNIYIVIDGSDSIGSS(de)NFTGAK	3184.5962	IPI00114065	IPI00114065	yes	no		4	0.01217	50.986
KIVIYIEHNIEK(de)NSTK	1928.0731	IPI00321190	IPI00321190	yes	no		3	0.064161	68.972
KKENGVFEEISN(de)SSGR	1779.8751	IPI00757771	IPI00757771	yes	no	2,3		3.312E-12	159.18
KKEVHFFVN(de)ASDVDSVK	1948.0054	IPI00310049	IPI00310049	yes	yes		3	0.006928	86.548
KKQEIPSN(de)CSIPYHVYNIK	2317.1889	IPI00311305	IPI00311305	yes	yes		3	6.7519E-05	121.82
KMVIWN(de)DSTIR	1361.7126	IPI00135975	IPI00135975	yes	yes		3	0.0070768	99.283
KN(de)ISEIWDAYCYR	1716.793	IPI00987265	IPI00987265	yes	no		3	0.0002954	142.1
KN(de)ITDIVEGAKK	1314.7507	IPI00649186	IPI00649186	yes	no		3	0.064325	77.597
KN(de)ITSPVGVQPIINEHTFCAGITK	2623.3792	IPI00409148	IPI00409148	yes	yes		3	9.0301E-13	126.91
KN(de)SSQIAFIYNDQPPK	1962.0211	IPI00114236	IPI00114236	yes	no		3	0.0005031	118.2
KNIQAVNEIATISQC(de)NDTSSAAMVQCIR	3234.5795	IPI00138342	IPI00138342	yes	no	3,4,5		5.9424E-07	98.684
KNPEAHMN(de)VSEIHK	1608.8294	IPI00652605	IPI00652605	yes	no		3	0.010063	86.803
KNV(de)NISYTVNDSFFPQRPQK	2381.2128	IPI00381178	IPI00381178	yes	yes	2,3,4,5		3.4769E-111	250.08
KNVNISYTV(de)NDSFFPQRPQK	2381.2128	IPI00381178	IPI00381178	yes	yes	2,3,4,5		3.4769E-111	250.08
KPIIGHYKPDIAVVIEN(de)GTSIDR	2635.4334	IPI00410796	IPI00410796	yes	no	3,4		6.6646E-08	109.85
KPISQEFAYVN(de)ASGEHGIVVFSIGSMVSEIPEKK	3805.9237	IPI00134691	IPI00134691	yes	no	4,5		7.3655E-12	100.58
KQIIN(de)ISQIVYGPEGSDIIVK	2426.3785	IPI00116509	IPI00116509	yes	no		3	1.7501E-07	113.86
KQIN(de)ITTVVAPHEAISR	1876.053	IPI00808027	IPI00808027	yes	no		3	0.0066438	83.54
KQPSPPGN(de)TTGGPIGSAASPAHQASQPIYINHP	3460.7124	IPI01027336	IPI01027336	yes	no		4	5.8239E-07	67.367
KQVTPIFFYFQ(de)NR	1686.8882	IPI00319509	IPI00319509	yes	no	2,3		0.0010961	119.39
KSCHTAVGTSEGWNVPMGIY(de)NQTGSCK	3081.4107	IPI00471080	IPI00471080	yes	no	3,4		0.0001751	84.947
KSDTQNIYIN(de)VSTGR	1694.8588	IPI01023214	IPI01023214	yes	no		3	0.0001284	125.97

KTCNPETFPIR(de)NESIQCPSTAR	2518.2057	IPI0064918E	IPI0064918E	yes	no		3	0.0002474	94.882
KTGEA(de)NITQIYTQEAFDIQTQHAR	2875.4464	IPI0031009C	IPI0031009C	yes	no	3,4		3.7571E-46	188.23
KTGVHDGDFEY(de)NITTTIAANK	2407.202	IPI0010884E	IPI0010884E	yes	no	3,4		7.4368E-12	142.97
KTHMFN(de)FTSGFK	1443.6969	IPI00121274	IPI00121274	yes	yes		3	0.01058	93.011
KTN(de)QSCEIVIDSTEK	1750.8407	IPI0031005E	IPI0031005E	yes	no	2,3		1.1294E-11	162.41
KTN(de)QSCEIVIDSTEKVNSYIGR	2637.3068	IPI0031005E	IPI0031005E	yes	no		3	1.7125E-30	168.27
KTTIEN(de)FTCPPEYK	1629.7709	IPI0042081C	IPI0042081C	yes	yes	2,3		0.008624	94.122
KTYAVYDIFDTAMIN(de)NSR	2121.0201	IPI0022679C	IPI0022679C	yes	no	2,3		2.8563E-08	139.08
KVC(de)NGIGIGEFKDTISINATNIK	2491.3105	IPI0012119C	IPI0012119C	yes	no	3,4		2.5947E-05	104.38
KVEAEAIN(de)ATAIR	1384.7674	IPI0075485E	IPI0075485E	yes	no		2	0.014575	85.457
KVEVEAVN(de)ATAVK	1356.7613	IPI0060806E	IPI0060806E	yes	no	2,3		1.4212E-09	159.22
KVEVEPIN(de)STAVHVSWK	1922.0262	IPI00110264	IPI00110264	yes	yes	2,3		2.098E-08	145.48
KVIIN(de)NSIDEPR	1396.7674	IPI0041114E	IPI0041114E	yes	no		3	0.0061851	99.752
KVIVAPPSEEA(de)NTTK	1582.8566	IPI0087541E	IPI0087541E	yes	no		2	0.0055355	93.51
KVPS(de)NSTETVIESDQFQPGVR	2317.155	IPI0011929E	IPI0011929E	yes	no	2,3		1.0087E-11	143.67
KVYEEVIN(de)VTPNDGFAK	1921.9785	IPI0062489E	IPI0062489E	yes	no	2,3		0.0004885	118.48
KWGH(de)NVTEFQQR	1528.7535	IPI0075438E	IPI0075438E	yes	yes	2,3		0.0016919	128.08
KWPERISAI(de)DNIINHSSIFIK	2480.354	IPI00123342	IPI00123342	yes	yes	3,4		3.6478E-07	117.26
KYEQAK(de)NISQDIEK	1692.8683	IPI0040001E	IPI0040001E	yes	no		2	1.1623E-10	164.41
KYFDQVDIS(de)NGIDWSIDHK	2279.0859	IPI0013345E	IPI0013345E	yes	yes		3	2.9063E-06	132.51
KYFSIKN(de)QTVPFIEEDVR	2325.2369	IPI00153202	IPI00153202	yes	no		3	0.0001609	105.39
KYHDYYITSTSN(de)GSIEGIENR	2446.1401	IPI00130754	IPI00130754	yes	yes		3	1.3519E-08	129.46
KYQTIN(de)CSVNVR	1480.7456	IPI0042083E	IPI0042083E	yes	no		3	0.0012635	123.67
MAAAIN(de)ATGRPIAFSCSWPAYEGGIPPKVNYTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no		4	3.7463E-05	68.942
MAAAINATGRPIAFSCSWPAYEGGIPPKVN(de)YTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no		4	3.7463E-05	68.942
MAIQYGSQNNQVAFPIYIN(de)VTTIHEAIER	3562.7879	IPI00621027	IPI00621027	yes	yes	3,4,5		7.2267E-59	178.53
MAIN(de)SSTEDGIK	1264.5969	IPI0012916E	IPI0012916E	yes	yes		2	0.015839	80.312
MCQIYPETFCVNTN(de)SSDIIQAFR	2810.2536	IPI0013439C	IPI0013439C	yes	yes		3	0.0021234	73.21
MDFIIFN(de)YSAPSIR	1835.8916	IPI0055350E	IPI0055350E	yes	yes		2	4.1919E-06	140.96
MDGHCAPIRTEAGVFE(de)YVADPTFENFTGGVK	3414.5649	IPI00405742	IPI00405742	yes	no		4	4.7442E-06	83.934
MDGHCAPIRTEAGVFE(de)YVADPTFENFTGGVKK	3542.6599	IPI00405742	IPI00405742	yes	no	3,4,5		2.0316E-07	94.73
MEAHN(de)VSAPFNFSIPPGFGHR	2311.0957	IPI00115482	IPI00115482	yes	no	2,3,4		6.4322E-17	155.79
MEAHNVSAPFN(de)FSIPPGFGHR	2311.0957	IPI00115482	IPI00115482	yes	no	2,3,4		6.4322E-17	155.79
MEISVGAIQAN(de)R	1287.6605	IPI00108811	IPI00108811	yes	yes		2	0.0009151	111.94
MFSQN(de)DTR	997.42873	IPI0012925C	IPI0012925C	yes	yes		2	0.0074272	128.38
MGCQHHCVPPTSGPTCYCN(de)SSFQIQADGK	3323.3675	IPI0011906E	IPI0011906E	yes	no	3,4		2.1131E-10	115.79
MGDREIGN(de)ASQIFDSWIK	2137.0262	IPI0013458E	IPI0013458E	yes	yes	2,3		6.0726E-20	166.77
MGFNTINSIISN(de)NSK	1638.8036	IPI00454124	IPI00454124	yes	no		2	4.0659E-06	141.37
MHING(de)SNVQVIHR	1503.7729	IPI0011906E	IPI0011906E	yes	yes	2,3,4		2.8261E-15	172.13
MIEN(de)GSISFIPTIR	1576.8283	IPI00123194	IPI00123194	yes	yes	2,3		3.4988E-32	193.47
MIHN(de)TTGVYTCSAHGTWTNEVIKR	2775.3221	IPI0047520E	IPI0047520E	yes	no		3	3.5007E-05	99.092
MITNEKIDAYNEA(de)AVSIINSSTR	2539.2588	IPI0038029E	IPI0038029E	yes	yes		3	0.019556	64.522
MNIQN(de)ISIVISPTVQEFIINCIR	2838.4884	IPI0085093C	IPI0085093C	yes	yes		3	0.0084218	72.771
MNPAGPVIEN(de)ETVTEICSTPK	2270.1287	IPI0098851E	IPI0098851E	yes	no	2,3		0.0084538	68.369
MPFPIDQDFYVSPFTQDIIN(de)R	2542.2202	IPI0031817E	IPI0031817E	yes	yes		3	7.9562E-08	120.11
MPSQASAGNVYPQPIIN(de)SSMCIEDSR	2851.2939	IPI00224752	IPI00224752	yes	yes	3,4		1.5709E-17	146.25
MQVVSN(de)GTVTTAIWR	1661.8559	IPI0033117E	IPI0033117E	yes	no	2,3		4.6763E-06	140.22
MRSPGAQ(de)DNVSVSQGMR	1818.8465	IPI0034858E	IPI0034858E	yes	no		3	3.9912E-11	152.94
MSPWSN(de)WSECDPCIK	1895.7641	IPI0023071E	IPI0023071E	yes	no	2,3		0.0002919	116.43
MSQHPIDIQEDFNN(de)ATIVNASSIIPK	2881.428	IPI00762812	IPI00762812	yes	yes		3	0.0002723	86.946
MSQHPIDIQEDFNNATIVN(de)ASSIIPK	2881.428	IPI00762812	IPI00762812	yes	yes		3	0.0002723	86.946
MTISQN(de)NSIIR	1275.6605	IPI0010853E	IPI0010853E	no	no		2	8.5268E-10	160.52
MTISSIKDDIGACRN(de)CCSVTK	2415.1015	IPI00223352	IPI00223352	yes	yes		3	0.0013683	88.385
MTQESAIIFPFIN(de)K	1637.8487	IPI0085778C	IPI0085778C	yes	no		3	0.0117	79.466
MVN(de)TTFICTATNAVGTGR	1912.9135	IPI0010937E	IPI0010937E	yes	no	2,3		5.8739E-12	251.41
MVSIDIPYFADVVVPIN(de)MTMK	2382.2037	IPI0041114E	IPI0041114E	yes	no		3	0.0050164	69.081
MYSEGSDIVPQSN(de)ETAIHYFK	2415.1053	IPI0013114E	IPI0013114E	yes	no	2,3		3.1457E-23	166.47
MYSEGSDIVPQSN(de)ETAIHYFKK	2543.2002	IPI0013114E	IPI0013114E	yes	no	2,3		4.7068E-39	178.43
MYVTN(de)DTEVAENNYEAIK	2102.9467	IPI0065853E	IPI0065853E	yes	no		2	2.7866E-24	131.31
MYVTN(de)DTEVAENNYEAIKDFFR	2668.2115	IPI0065853E	IPI0065853E	yes	no	2,3		1.2839E-07	120.24
N(de)ATIVNEADKIR	1342.7205	IPI0031950E	IPI0031950E	yes	no		2	0.0018635	117.7
N(de)ATTYPPMCSQDAAR	1681.7188	IPI0012839E	IPI0012839E	yes	yes	2,3		4.9387E-05	126.48
N(de)GSIFAFR	910.4661	IPI0012924C	IPI0012924C	yes	no		2	1.6447E-10	151.44
N(de)GTNDGEYVFITGEDNYINFSK	2496.1081	IPI00127447	IPI00127447	yes	yes		3	6.8312E-17	155.86
N(de)GTSFDIHYGSGSISGYISQDTSVPCPK	2975.3607	IPI00404551	IPI00404551	yes	no		3	0.000174	77.939
N(de)ISEGFSGIPDNVDAAFAIPAHR	2397.1713	IPI0012924C	IPI0012924C	yes	yes		3	6.7066E-08	107.41
N(de)MTIFSDIVAEK	1366.6803	IPI00621027	IPI00621027	yes	no		2	0.000636	118.13
N(de)STICDICIGPIK	1489.7269	IPI0013978E	IPI0013978E	yes	no		2	1.551E-06	152.88
N(de)STIQAANIAGIK	1299.7147	IPI00222937	IPI00222937	yes	no		2	0.0004592	132.31
N(de)STTIVMHMK	1160.5682	IPI0011906E	IPI0011906E	yes	yes		2	0.016568	87.184
N(de)TTISVHPSTR	1211.6258	IPI00126834	IPI00126834	yes	no		2	0.0004336	118.76
N(de)TTSAAMVHCIR	1359.6387	IPI0013121E	IPI0013121E	yes	yes		2	0.016321	79.492
N(de)TTSYPPMCSQDAVGGQVISEIFTNR	2871.3167	IPI0038728E	IPI0038728E	yes	yes		3	2.3522E-45	181.82
N(de)TTSYPPMCSQDAVGGQVISEIFTNRK	2999.4117	IPI0038728E	IPI0038728E	yes	yes	3,4		5.4547E-05	93.804
N(de)VTIECPFKR	1262.6441	IPI0031005E	IPI0031005E	yes	no		2	0.0003408	123.79
NACCSVN(de)TSQEIHK	1646.7141	IPI0011315E	IPI0011315E	yes	yes		2	0.015582	76.358
NAIN(de)ITFHAQNIPEGGAYEAEIR	2487.2142	IPI0011597E	IPI0011597E	yes	yes	2,3,4		1.6817E-17	155.87
NAIQAFGN(de)GTDVNMSPK	1762.8308	IPI0011635E	IPI0011635E	yes	no		2	2.8381E-15	162.26
NAKGDEKEN(de)ITAEADISIK	2158.1117	IPI0012472E	IPI0012472E	yes	no	2,3		5.8352E-05	115.57
NAN(de)CSTVSPGQTQCTCQK	2039.8459	IPI0046760C	IPI0046760C	yes	yes		3	0.016514	67.416
NATIAEQAKI(de)PATEKPVIIISK	2221.2682	IPI00123342	IPI00123342	yes	yes		3	3.9779E-07	116.29
NAVN(de)CTYKNEDDCVVR	1955.8466	IPI00266264	IPI00266264	yes	yes		2	0.0065233	88.992
NCGVN(de)CSGDVFTAIIIGEISSPNYPNPENSR	3527.5722	IPI0065367E	IPI0065367E	yes	no		4	4.1484E-07	85.595
NCKPIIIDN(de)VSFFGVK	1849.976	IPI00122581	IPI00122581	yes	no		3	6.3176E-18	170.11
NCKPIIIDN(de)VSFFGVKDK	2093.0979	IPI00122581	IPI00122581	yes	no		3	0.0005136	105.39
NEDRPIAPCGAIANSMFN(de)DTIEIYIVANESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no	4,5		9.2358E-15	91.942

NEDRPIAPCGAIANSFNDTIEIYIVAN(de)ESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no	4,5	9.2358E-15	91.942
NEIMIN(de)SSIMR	1306.6373	IPI0037869E	IPI0037869E	yes	no		2 0.028723	71.176
NEIQVN(de)TSQIPDTVTHYSEIYHDFTTTQVGMHDIVR	4187.9858	IPI0012843Z	IPI0012843Z	yes	yes		4 9.2989E-06	66.378
NF(de)TAADWGHRS	1260.5636	IPI0033988E	IPI0033988E	yes	no		2 0.0009286	110.31
NFKDITNIIN(de)NTFIR	1821.9737	IPI0065003E	IPI0065003E	yes	no		3 0.0005541	120.84
NFQCVN(de)ASVINYDCDIQGK	2243.994	IPI0062648E	IPI0062648E	yes	no	2,3	9.8581E-147	265.22
NGDAYG(de)YYNDSIK	1478.6314	IPI00471081	IPI00471081	yes	yes		2 0.0002542	141.85
NGDAYGYN(de)DSIK	1478.6314	IPI00471081	IPI00471081	yes	yes		2 0.0002542	141.85
NGIASGSGN(de)CSTGPNGDGSFHAWSIIEVK	2918.3253	IPI00322497	IPI00322497	yes	yes	3,4	2.9539E-41	172.37
NGIYN(de)ITVIAIDADGR	1703.8842	IPI0013820E	IPI0013820E	yes	no	2,3	7.1124E-15	167.82
NGN(de)WSEPPMCIHACVIPENIMEAHNIIIK	3386.6032	IPI0100867E	IPI0100867E	yes	no		4 0.0093343	53.998
NGNA(de)TIIR	857.47191	IPI0098582E	IPI0010999E	no	no		2 0.014243	120.99
NGNATI(de)IR	857.47191	IPI0098582E	IPI0010999E	no	no		2 0.014243	120.99
NGTNDGEYVFITGEDNYIN(de)FSK	2496.1081	IPI00127447	IPI00127447	yes	yes		3 6.8312E-17	155.86
NI(de)KEEKANVVASAIQIPQK	2150.2059	IPI0015314Z	IPI0015314Z	yes	yes		3 1.7291E-13	150.91
NI(de)TSPVGVQPIINEHTFCAGITK	2495.2842	IPI0040914E	IPI0040914E	yes	yes		3 0.0001632	93.269
NIETFAMN(de)ICEHFISFNHVTR	2666.237	IPI00223367	IPI00223367	yes	no	3,4	9.5126E-08	121.26
NIFIN(de)HSETASAK	1430.7154	IPI0040914E	IPI0040914E	yes	yes	2,3	1.7616E-217	216.88
NIGGIETEDDYGYQGHVQTCN(de)FSAQMAK	3132.3553	IPI0012676E	IPI0012676E	yes	yes	3,4	2.2353E-06	101.41
NIGPN(de)TTSTTITSDDFKPGVVR	2220.1022	IPI00118291	IPI00118291	yes	no		3 0.0056888	79.393
NIIGIDENFVIN(de)SSTEHR	2057.0178	IPI0040660Z	IPI0040660Z	yes	yes	2,3	1.9432E-21	172.84
NIINDYVSN(de)QTQGMKIK	1836.904	IPI0013183C	IPI0013183C	yes	no	2,3	1.4163E-96	232.53
NIINDYVSN(de)QTQGMKIEIIEIDER	2921.4441	IPI0013183C	IPI0013183C	yes	no	3,4	1.7511E-44	180.04
NIIPN(de)ITTSYIK	1375.7711	IPI0047108E	IPI0047108E	yes	no		2 0.0013829	106.26
NIKRPYIVPII(de)WINETGTIGDEK	2668.4588	IPI00331214	IPI00331214	yes	yes		3 5.0096E-12	142.98
NIMIDIQKDTAVEGEEIEVN(de)CTAMASKPATTIR	3647.7845	IPI0085672Z	IPI0085672Z	yes	no	3,4	3.386E-11	108.49
NIPWYVIAGNHDHIGN(de)VSAQIAYS	2766.3878	IPI00137491	IPI00137491	yes	yes	2,3,4	1.1546E-16	144.27
NIQAVNEIATISQCN(de)DTSSAAMVQCIR	3106.4846	IPI0013834Z	IPI0013834Z	yes	no	2,3,4	2.7369E-51	183.07
NIQVYN(de)ATSNSITVK	1650.8577	IPI0012143C	IPI0012143C	yes	no		2 3.9948E-70	222.45
NITAFN(de)ETIFR	1324.6776	IPI0012470C	IPI0012470C	yes	yes		2 3.3668E-06	149.23
NITVI(de)EPVTQPFIVTNTTVK	2341.2893	IPI0010853E	IPI0010853E	yes	no		3 4.6767E-50	195.46
NITVIEPVTQPFIVTN(de)TTVK	2341.2893	IPI0010853E	IPI0010853E	yes	no		3 4.6767E-50	195.46
NKANIQFGEN(de)GTTISAVTNK	2106.0705	IPI00127447	IPI00127447	yes	yes	2,3	1.116E-41	191.78
NKNPQMN(de)FTEANEACK	1894.8302	IPI0030824E	IPI0030824E	yes	yes		3 3.6323E-25	182.02
NMICQWDPGRETIEYTN(de)YTIK	2631.2098	IPI0012015E	IPI0012015E	yes	yes		3 3.7084E-11	137.69
NMPPRIPANTMQIFIDN(de)NSIEGIPENYFNVIPK	3785.8909	IPI00129867	IPI00129867	yes	no		4 0.0019952	57.803
NN(de)DSTINNSATTIIGIQDCR	2319.1125	IPI0088174E	IPI0088174E	yes	no		3 1.0793E-05	103.71
NNDSTIN(de)NSATTIIGIQDCR	2319.1125	IPI0088174E	IPI0088174E	yes	no		3 1.0793E-05	103.71
NNQT(de)ECFNHVR	1417.6157	IPI0012466E	IPI0012466E	yes	no		2 0.0092184	88.338
NPCNITREDY(de)APIVK	1788.8829	IPI0030796E	IPI0030796E	yes	yes	2,3	6.7285E-06	143.93
NPCTSEQN(de)CTSPFSYK	1918.7826	IPI00132474	IPI00132474	yes	yes		2 4.1489E-13	161.91
NPIGQAQSAVVIN(de)VTER	1794.9588	IPI0011929E	IPI0011929E	yes	no	2,3	1.4749E-08	144.73
NPNN(de)NTIHPNIR	1402.7066	IPI0031950E	IPI0031950E	yes	no	2,3	0.0007839	122.39
NPSANTFIHINA(de)SSFR	1774.8751	IPI0031553E	IPI0031553E	yes	yes		2 3.5056E-05	129.43
NQIVEI(de)EKVVIHPNHSVVDIGIIK	2692.5276	IPI0040914E	IPI0040914E	yes	yes	3,4	5.9534E-27	165.19
NSFN(de)ISNIIVIHISHNK	1949.0483	IPI0012229Z	IPI0012229Z	yes	yes		3 0.0060494	78.505
NSQFDMN(de)STDIAIK	1582.7297	IPI0034606Z	IPI0034606Z	yes	yes		2 0.0001276	123.42
NTDKENPYIGIGN(de)YTICR	2127.0055	IPI0046823E	IPI0046823E	yes	no		3 0.000388	108.77
NTETNVF(de)PQDKVIAGSNMTICCMSPTK	3141.4603	IPI0011929E	IPI0011929E	yes	no	3,4	1.6964E-51	187.16
NTGEIN(de)ITSIDREETPYFIITGYAIDSR	3300.6514	IPI0011579Z	IPI0011579Z	yes	no		3 2.1473E-19	133.95
NTQADVIN(de)ASWSVISNSTR	2062.0079	IPI0013218E	IPI0013218E	yes	yes	2,3	1.6139E-52	199.99
NTQADVIN(de)ASWSVISNSTRHEIER	2726.3372	IPI0013218E	IPI0013218E	yes	yes		3 5.649E-05	101.49
NTQADVINASWSVISN(de)STR	2062.0079	IPI0013218E	IPI0013218E	yes	yes	2,3	1.6139E-52	199.99
NTQADVINASWSVISN(de)STRHEIER	2726.3372	IPI0013218E	IPI0013218E	yes	yes		3 5.649E-05	101.49
NTQIIPVSEAIHESFDN(de)ETIVNDIMIIK	3279.6697	IPI00120351	IPI00120351	yes	yes		3 8.502E-07	103.25
NVAIVAGDTGN(de)ATGIGEQGPTR	2097.0451	IPI0012227Z	IPI0012227Z	yes	no	2,3	0	381.1
NVN(de)ISYIVNDSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3,4	1.2004E-10E	248.13
NVN(de)ISYTVNDSFFPQR	1899.9115	IPI0038117E	IPI0038117E	yes	yes		2 0.0016383	92.977
NVN(de)ISYTVNDSFFPQRPQK	2253.1178	IPI0038117E	IPI0038117E	yes	yes	2,3,4	4.1645E-29E	326.53
NVN(de)ISYTVNDSFFPQRPKIANK	2792.461	IPI0038117E	IPI0038117E	yes	yes		3 0.0008894	90.972
NVN(de)MSVICPTTIR	1503.7538	IPI00129867	IPI00129867	yes	no		2 1.4562E-15	174.95
NVNISYIVNDS(de)FFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3,4	1.2004E-10E	248.13
NVNISYTVN(de)DSFFPQR	1899.9115	IPI0038117E	IPI0038117E	yes	yes		2 0.0016383	92.977
NVNISYTVN(de)DSFFPQRPKIANK	2253.1178	IPI0038117E	IPI0038117E	yes	yes	2,3,4	4.1645E-29E	326.53
NVNISYTVN(de)DSFFPQRPKIANK	2792.461	IPI0038117E	IPI0038117E	yes	yes		3 0.0008894	90.972
NVPGEIGINYN(de)ITADVAQK	2015.0324	IPI00130117	IPI00130117	yes	yes		3 4.1244E-05	106.57
NVTVV(de)IR	799.49159	IPI0046921E	IPI0046921E	yes	yes		2 0.055841	86.794
NVVN(de)ITINDEAAMVEAVIYNPVSFAFEVTEDFIMYK	4166.0268	IPI00118987	IPI00118987	yes	yes	3,4	0.0042385	44.021
NYEVQIFHVN(de)ATVTEEGTGIEFSR	2739.314	IPI0012322Z	IPI0012322Z	yes	yes	2,3	1.2773E-20E	284.98
NYFHYN(de)QSFPPSYNIK	2017.9323	IPI0012926E	IPI0012926E	yes	yes	2,3	2.8854E-32	142.1
NYKNPN(de)ITISFTAER	1766.8951	IPI0013260C	IPI0013260C	yes	no	2,3	0.0004251	122.63
NYN(de)FTIACNTK	1344.6132	IPI0032257E	IPI0032257E	yes	no	2,3	0.0002402	142.83
NYN(de)FTIACNTKR	1500.7143	IPI0032257E	IPI0032257E	yes	no		2 0.017394	86.313
NYYADN(de)QTCDGEIIFNMTK	2295.9776	IPI0082822Z	IPI0082822Z	yes	no		3 0.0002346	94.845
NYYADN(de)QTCDGEIIFNMTTK	2424.0726	IPI0082822Z	IPI0082822Z	yes	no		3 7.1416E-05	102.78
NYYADNQTCDGEIIFN(de)MTK	2295.9776	IPI0082822Z	IPI0082822Z	yes	no		3 0.0002346	94.845
NYYADNQTCDGEIIFN(de)MTTK	2424.0726	IPI0082822Z	IPI0082822Z	yes	no		3 7.1416E-05	102.78
PGHDEGAHNPDYEN(de)ITIAFR	2252.0247	IPI00112047	IPI00112047	yes	yes		2 0.0093657	69.935
QAIQTMQSEFFYITNIIN(de)DTIEIR	2988.4903	IPI0011813C	IPI0011813C	yes	yes		3 1.4606E-18E	191.65
QAVIQVN(de)QSFVSSTAQK	1833.9585	IPI0035646Z	IPI0035646Z	yes	no		3 0.008099	75.018
QCDREHDCKDMSDEIGCVN(de)VTQCDGPNK	3366.3428	IPI0031206Z	IPI0031206Z	yes	no		4 0.00232	68.445
QCQEIQEVN(de)KTCEAIIFK	2365.177	IPI0011511E	IPI0011511E	yes	yes		3 4.0028E-06	133.25
QDIAISGN(de)ISSIYAMTQDK	2053.999	IPI0040574Z	IPI0040574Z	yes	no	2,3	9.5196E-12E	255.82
QEHSQIVYHQSIN(de)ETISK	2253.139	IPI0035646Z	IPI0035646Z	yes	no		3 0.00123	86.213
QEIN(de)DSIQVAER	1400.6896	IPI0032042C	IPI0032042C	yes	yes		2 8.4348E-31	190.37
QENNIINAEHGN(de)SSIFIENSTFESFGYHSVSPDR	4064.9141	IPI0012581Z	IPI0012581Z	yes	no		4 2.0208E-11	95.108

QENNIINAIEHGNSSIFIEN(de)STFESFGYHSVSPDR	4064.9141	IPI00125813	IPI00125813	yes	no		4	2.0208E-11	95.108
QETFGAIDIGGASTQITFVPQN(de)STIESPENSIQFR	3781.8435	IPI0062695C	IPI0062695C	yes	no		4	0.0019344	51.617
QEVMFITNVN(de)SSSSSTQIYQAVSR	2675.2861	IPI00112614	IPI00112614	yes	yes		3	0.017627	55.228
QFAPSPNCN(de)KTEIIATIK	2031.0459	IPI0077609E	IPI0077609E	yes	no		3	0.0003672	110.97
QFFN(de)ASVQFDNMDPIIDYINQR	2674.2486	IPI00117842	IPI00117842	yes	yes		3	3.237E-12	143.52
QFWIFDVQNPDDVAKN(de)SSK	2237.0753	IPI00331214	IPI00331214	yes	yes	2,3		1.9129E-65	218.25
QGDQYSCMVGHEAIPMN(de)FTQK	2440.061	IPI0047388C	IPI0047388C	yes	no	2,3,4		1.2346E-07	111.4
QGPQAGGTTITIN(de)GTHIDTGSK	2153.0713	IPI00405742	IPI00405742	yes	no		3	9.8711E-08	111.66
QGPQAGGTTITIN(de)GTHIDTGSKEDVR	2652.3103	IPI00405742	IPI00405742	yes	no	3,4		1.3465E-08	113.36
QHGQFSIAVVGINIT(de)SIGIR	2109.1695	IPI0012119C	IPI0012119C	yes	no		3	0.0012629	84.375
QIGASPSDDIIFGVFAQSKPDSAEPVN(de)R	2944.4567	IPI0013042C	IPI0013042C	yes	no	3,4		0.0012317	72.316
QIIAN(de)SSAIEETIIGHQGR	2036.0651	IPI00116913	IPI00116913	yes	no	2,3		1.8129E-191	290.57
QIINAIQIN(de)NTAVGHAIVIPAR	2325.3281	IPI0083074E	IPI0083074E	yes	yes		3	4.0075E-72	213.99
QIINAIQIN(de)NTAVGHAIVIPARR	2481.4292	IPI0083074E	IPI0083074E	yes	yes		4	5.5646E-08	117.3
QIIQTQVASPAIHPPVSYN(de)DTAPR	2602.3503	IPI0012898E	IPI0012898E	yes	no		3	1.4548E-20	148.01
QIITEEKIPN(de)NTQWITWSPEGHK	2748.3871	IPI00125813	IPI00125813	yes	no	2,3,4,5		2.9935E-277	318.69
QIITEEKIPN(de)NTQWITWSPEGHKIAYVWK	3508.8143	IPI00125813	IPI00125813	yes	no		4	5.4588E-06	100.79
QIN(de)ISDSIAVIGIAK	1540.8825	IPI00463492	IPI00463492	yes	yes		2	4.1867E-12	163.8
QIN(de)ISDSIAVIGIAKPAHIYSK	2337.3056	IPI00463492	IPI00463492	yes	yes	3,4		1.5388E-08	127.32
QIN(de)ISIIVK	1026.6437	IPI0011511E	IPI0011511E	yes	yes		2	0.0029289	128.03
QIN(de)ITTEDDDIYHMTVPYGRPR	2633.2544	IPI00265291	IPI00265291	yes	yes		3	6.6294E-05	97.32
QINAYN(de)R	877.44061	IPI0047319C	IPI0047319C	yes	no		2	0.011951	104.11
QINNGEIQPISEN(de)TTITFMSTK	2465.2108	IPI00126834	IPI00126834	yes	no		3	5.1899E-49	195.53
QINPPHTAN(de)SSITSK	1593.8111	IPI0098839C	IPI0098839C	yes	yes		3	0.0035626	88.552
QISCVANQN(de)GSQADCEIGNPFKR	2592.1809	IPI0042083E	IPI0042083E	yes	no		3	7.5725E-08	114.55
QIWDWSKHN(de)ITITQGK	1954.0061	IPI0012835E	IPI0012835E	yes	no		2	3.724E-07	144.97
QIYPYN(de)SSNR	1240.5836	IPI0022982C	IPI0022982C	yes	yes		2	0.0015335	112.36
QKN(de)VNISYIVNDSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	3,4,5		2.4168E-85	223.11
QKNVNISYIVN(de)DSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	3,4,5		2.4168E-85	223.11
QN(de)FSFCR	957.41269	IPI00381303	IPI00381303	yes	yes		2	0.04925	89.142
QN(de)FSNITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2	3.1963E-15E	272.95
QN(de)ITQKR	886.49846	IPI0013458E	IPI0013458E	yes	no		2	0.016975	124.83
QNFSN(de)ITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2	3.1963E-15E	272.95
QNPMTIGNVVI(de)FDKVTNQESPYQNHTGR	3299.6357	IPI0012531C	IPI0012531C	yes	no	3,4		8.8437E-06	95.834
QPEKTD(de)AEINETARPISPVNPK	2433.25	IPI0040889E	IPI0040889E	yes	yes		3	0.010645	73.809
QPIYIN(de)CSCVTGGSASAK	1911.8819	IPI0030924E	IPI0030924E	yes	yes		2	2.4954E-48	202.96
QPKDCDFIEDGEERN(de)CTGK	2296.9689	IPI0012728C	IPI0012728C	yes	yes		3	1.6063E-05	126.25
QPNMN(de)ITQIK	1185.6176	IPI00310567	IPI00310567	yes	yes		2	0.020428	86.344
QQTECMVQQYSN(de)YSVNGEPVNGR	2687.1704	IPI0039684C	IPI0039684C	yes	no		3	9.8077E-08	115.42
QRYEDIVIN(de)ETINK	1733.8948	IPI00285117	IPI00285117	yes	no	2,3		0.0002491	130.07
QRYHGF(de)INTSYHR	1677.8124	IPI0015405E	IPI0015405E	yes	no		3	0.031567	82.362
QRYN(de)ITAK	992.54033	IPI00130661	IPI00130661	yes	yes		2	2.4655E-05	134.26
QSDYCWEIAPHMYFITPGQQPQPITNIIIVN(de)K	3897.9222	IPI0032257E	IPI0032257E	yes	no	4,5		0.0003557	61.499
QSDYCWEIAPHMYFITPGQQPQPITNIIIVN(de)KTGAK	4255.1235	IPI0032257E	IPI0032257E	yes	no	4,5		0.000407	59.792
QSN(de)GSIAVISSIAGK	1430.7729	IPI0011559E	IPI0011559E	yes	no	2,3		2.4411E-44	205.98
QSQPVHIIPMN(de)ETDHINMVFSNK	2678.2945	IPI0013350C	IPI0013350C	yes	yes	3,4		2.9836E-08	114.88
QSQPVHIIPMNEDHINMVFSN(de)K	2678.2945	IPI0013350C	IPI0013350C	yes	yes	3,4		2.9836E-08	114.88
QSTINTVDIYPMCHIIIGIKPHPNN(de)GTISHTK	3616.7953	IPI00225072	IPI00225072	yes	no		4	0.0001458	67.641
QTGDVTCN(de)CTDGR	1482.5827	IPI00119063	IPI00119063	yes	yes		2	0.0027074	100.4
QTPEYQN(de)R	1034.4781	IPI0015405E	IPI0015405E	yes	no		2	0.0087677	113.18
QTQVGIVQYGAN(de)VTHEFNINK	2359.1921	IPI00466371	IPI00466371	no	no	2,3		8.7219E-101	237.31
QTQVGIVQYGAN(de)VTHEFNINKYSSTEEVIVAANK	3750.8853	IPI00466371	IPI00466371	no	no		4	0.015319	47.919
QTTAMDFSYAN(de)ETVCWVHVGDSAAQTQIK	3257.4758	IPI00119063	IPI00119063	yes	no	3,4		8.4953E-10	114.01
QVAIQTFGN(de)QTSIIPAGGAGYK	2220.1539	IPI0022871E	IPI0022871E	yes	yes	2,3,4		1.2593E-30	168.3
QVEEIIIVN(de)HTGIR	1506.8154	IPI00263041	IPI00263041	yes	yes		2	0.0009175	111.83
QVEIIEYPYHEQIIVVAPEIITGHN(de)YTIK	3463.8028	IPI00223987	IPI00223987	yes	yes	3,4		7.6963E-42	171.3
QVSTIIN(de)NTDK	1231.6408	IPI0039684C	IPI0039684C	yes	no		2	6.9594E-07	155.86
QVTPIFFYFQN(de)R	1558.7932	IPI0031950E	IPI0031950E	yes	no	2,3		0.0005216	134.75
QYYN(de)SSGTQSQR	1417.6222	IPI00848991	IPI00848991	yes	no		2	0.016914	79.492
RAEDYGPVEVISHWHP(de)NITINIVDDHTPWVK	3636.8114	IPI00121627	IPI00121627	yes	yes		4	3.1519E-07	79.382
RAEDYGPVEVISHWHPNITI(de)NIVDDHTPWVK	3636.8114	IPI00121627	IPI00121627	yes	yes		4	3.1519E-07	79.382
RCTICDEEHGIEVETN(de)CTITQNTK	2907.2797	IPI0011089E	IPI0011089E	yes	yes		3	1.3095E-34	168.64
RDDIHPTIPAGQYFI(de)NITYNYPVHSFDGR	3405.6531	IPI0038731E	IPI0038731E	yes	no	3,4		2.1619E-22	143.32
RDDYRPTWTI(de)NQTEPVAGNYYPVNTR	3125.4955	IPI00381303	IPI00381303	yes	yes	3,4		1.5425E-13	133.74
RDQGN(de)VTDMA SMK	1451.6497	IPI00471081	IPI00471081	yes	yes		3	9.3003E-07	155.86
RFANEYPN(de)ITR	1379.6946	IPI00130573	IPI00130573	yes	yes		2	0.0007781	134.99
RFHSDIN(de)ISESIIPAVIEK	2167.1637	IPI00831484	IPI00831484	yes	yes		3	0.000817	93.495
RFIQSAEFFN(de)YTVR	1776.8948	IPI0012740E	IPI0012740E	yes	yes		2	0.0079856	93.348
RFTAPDTIFA(de)NGSVYPPNEGFCPCR	2872.3061	IPI0085713C	IPI0085713C	yes	yes		3	0.0010092	83.251
RGCKDN(de)ATDSVPIR	1587.7787	IPI00119063	IPI00119063	yes	yes	2,3		0.0080521	101.3
RGDDIYTN(de)VTVSIVEAIVGFEMDITHIDGHK	3443.7031	IPI00320241	IPI00320241	yes	yes	3,4,5,6		1.91E-83	201.66
RGPECSQN(de)YTAPTGVIK	1876.9101	IPI0012399E	IPI0012399E	yes	yes	2,3		0.0007125	112.24
RGFTFDCAIAN(de)MTQQIR	1981.9462	IPI00621027	IPI00621027	yes	no	2,3		3.7007E-11	152.37
RGVFITN(de)ETGQPIIGK	1728.9523	IPI0011196C	IPI0011196C	yes	no	2,3		8.235E-09	147.56
RIAVDWESIGYN(de)ITR	1791.9268	IPI0012304C	IPI0012304C	yes	no	2,3		0.0018713	108.58
RIGAIN(de)NSIIIEDR	1695.9632	IPI0011551E	IPI0011551E	yes	no	2,3		1.3033E-05	137.8
RIQEGHEYDTFDIN(de)DTAQCFTK	2687.1922	IPI00400073	IPI00400073	yes	yes		3	4.1291E-59	200.6
RIYAGMVSIMDEAVGN(de)VTK	2053.0336	IPI0065235E	IPI0065235E	yes	no		3	8.1266E-05	110.77
RMEISVGAIQAN(de)R	1443.7616	IPI00108811	IPI00108811	yes	yes		3	0.0002383	142.97
RMHIN(de)GSNVQVIHR	1659.874	IPI00119063	IPI00119063	yes	yes	2,3		0.0049967	100.55
RN(de)FTAADWGH SR	1416.6647	IPI0033988E	IPI0033988E	yes	no		3	0.0027912	106.17
RNPSANTFIHIN(de)ASSFR	1930.9762	IPI0031553E	IPI0031553E	yes	yes	2,3		6.7549E-11	148.41
RPFVVYEMEVDTIETTCHAIPTPIAN(de)CSVR	3676.7324	IPI0012824E	IPI0012824E	yes	yes	3,4,5		2.8557E-35	156.73
RPYIVPIIWIN(de)ETGTIGDEK	2313.2369	IPI00331214	IPI00331214	yes	yes		3	2.8651E-05	118.48
RPYIVPIIWIN(de)ETGTIGDEKAEMFK	2919.5205	IPI00331214	IPI00331214	yes	yes	3,4		7.4821E-12	121.21
RSN(de)FTPATNEAPQATVFPK	2075.0436	IPI0017203E	IPI0017203E	yes	no	2,3		2.2583E-32	179.87



RSPGAQD(de)NVSVSQGM	1687.806	IPI0034858€	IPI0034858€	yes	no		3	1.2208E-12	158.81
RVIYIPAY(de)NCTIRPVS	2049.1194	IPI00469387	IPI00469387	yes	no	2,3		0.001318	109.1
RVM(de)EVNFISYVVMSTAAIPMIKQSNNGSIAVISSIAIGK	3911.0723	IPI0011559€	IPI0011559€	yes	no		5	0.012365	47.989
RVN(de)ASTTDPNSTVEQSAITR	2146.0614	IPI0033878€	IPI0033878€	yes	no		3	0.0012316	89.049
RVNDN(de)KTAAEEAIR	1585.8172	IPI0040001€	IPI0040001€	yes	no	2,3		0.0079686	101.43
RVSN(de)ESAAPIVPAVPRPEVDNITIR	2699.4719	IPI0012228€	IPI0012228€	yes	yes		3	0.0005193	93.73
RVSNESAAPIVPAVPRPEVDN(de)ITIR	2699.4719	IPI0012228€	IPI0012228€	yes	yes		3	0.0005193	93.73
RYIEIG(de)NETIIR	1475.8096	IPI00850057	IPI00850057	yes	no	2,3		2.9849E-41	199.82
SAEGTFFIN(de)K	1112.5502	IPI0012552€	IPI0012552€	yes	no		2	0.0019854	110.84
SAEGTFFIN(de)KTK	1341.6929	IPI0012552€	IPI0012552€	yes	no	2,3		0.0017741	132.79
SAEN(de)FTVVIK	1120.6128	IPI00130271	IPI00130271	yes	no		2	7.8137E-07	152.07
SAGN(de)MSTYNCCI	1585.7229	IPI0013352€	IPI0013352€	yes	yes	2,3		5.2245E-05	135.02
SAVFHRIEGITN(de)ETIR	1891.9541	IPI0011929€	IPI0011929€	yes	no		2	0.0030919	98.676
SAVGTISGN(de)SSNVIQIIDAYNSISSEVIIENSKIPDGVNTINYK	4622.3967	IPI00132474	IPI00132474	yes	yes		5	5.6149E-21	109.27
SAVSTSWIIPYN(de)HTWSHEK	2242.0807	IPI0012442€	IPI0012442€	yes	yes	2,3		9.7406E-26	174.39
SCADEGFSTPCAFVAVSGAN(de)GSVIWERPVAQDVAIVK	3992.9401	IPI0041079€	IPI0041079€	yes	yes	3,4		8.0318E-37	147.25
SCAISEIGCPMDIFQHSAFADIN(de)VSQVITPDAFVCR	4054.8686	IPI00113057	IPI00113057	yes	yes	3,4		0.0021856	50.322
SCGECIQAGPNCGWCTN(de)TTFIQEGMPTSAR	3389.3992	IPI00132474	IPI00132474	yes	yes	3,4		3.6636E-20	133.29
SCHTAVGTSEGWNVPMGIYN(de)QTGSCK	2953.3157	IPI0047108€	IPI0047108€	yes	no	3,4		1.3462E-05	95.138
SCVAITDAFPQN(de)MSR	1695.7709	IPI0040574€	IPI0040574€	yes	no	2,3		3.8061E-08	151.04
SDFSQTMIFQAN(de)TTR	1745.8043	IPI00114671	IPI00114671	yes	no		2	2.3809E-44	205.95
SDGIPIAPCGAIANSIFN(de)DSFSIWHQR	2972.4239	IPI0022185€	IPI0022185€	yes	yes	3,4		7.8104E-14	122.47
SDIIVQTDATNPSVPIDPISVSN(de)SSSQIIK	3400.7613	IPI0012835€	IPI0012835€	yes	no		4	0.0011822	55.691
SDIN(de)CSVMEATEEK	1611.6756	IPI0013001€	IPI0013001€	yes	no		2	9.8235E-11	157.8
SDINPAN(de)GSYPFQAIHQ	2013.9657	IPI0016573€	IPI0016573€	yes	yes	2,3		3.1938E-89	231.37
SEEIEFIGN(de)SSIR	1479.7205	IPI0032061€	IPI0032061€	yes	yes		2	9.5989E-05	143.94
SEHIVN(de)FTVK	1172.619	IPI00330481	IPI00330481	yes	yes	2,3		0.000315	119.53
SEYQK(de)WECKNDTIFGIK	2145.0201	IPI0012618€	IPI0012618€	yes	yes	2,3		6.9887E-48	207.92
SFDCCGIFN(de)ITTIR	1702.7807	IPI0013218€	IPI0013218€	yes	yes	2,3		8.4402E-08	155.66
SFIISIAIHDN(de)HTHSDIQVK	2345.2128	IPI00130624	IPI00130624	yes	yes	2,3,4		3.0374E-23	166.57
SFMVN(de)WTQSPGKVEK	1736.8556	IPI0033063€	IPI0033063€	yes	no	2,3		1.8181E-43	200.77
SFMVN(de)WTQSPGKVEKYR	2056.02	IPI0033063€	IPI0033063€	yes	no		3	0.0017328	102.28
SFPVYIN(de)GSTVPSPVK	1690.893	IPI0022993€	IPI0022993€	yes	no		2	6.8053E-11€	170.11
SFQQSHVHVHDIQSFIDNIN(de)MTHYIK	3194.5356	IPI0062655€	IPI0062655€	yes	no	3,4		1.8656E-59	192.57
SFSGIIDCGN(de)CSR	1471.6184	IPI0062679€	IPI0062679€	yes	no		2	1.7861E-06	152.16
SFTVN(de)WTPPAGDWEHYR	2061.9333	IPI0022993€	IPI0022993€	yes	no		3	0.0030745	83.966
SFWYHDMDDPKGHIIAQVA(de)TNPQGITGTGNTTSEMDPSHR	4524.0863	IPI0032137€	IPI0032137€	yes	no		4	2.3845E-07	67.064
SGDASIN(de)VTNIQISDIGTYQCK	2383.1326	IPI0027037€	IPI0027037€	yes	no	2,3		6.7388E-17€	276.26
SGNIEHPEDKIFN(de)TSVEVIPFDNPQSEKEAIQEGR	3952.9079	IPI0033621€	IPI0033621€	yes	yes		4	1.9007E-05	71.085
SGQEDHYWIDVEKN(de)QSAK	2132.9763	IPI0031950€	IPI0031950€	yes	no	2,3,4		2.3765E-10€	248.1
SGQVEVN(de)ITEFPYTPPEHGR	2357.1288	IPI0031140€	IPI0031140€	yes	yes		3	7.8516E-12	141.64
SGSGIVGQQIEEFIN(de)QSSPFYFWMNGDR	3192.4611	IPI0032042€	IPI0032042€	yes	no		4	0.0001368	80.102
SGTIFDNFIITNDEAYAEFGN(de)ETWGVTK	3267.4884	IPI0012363€	IPI0012363€	yes	yes	3,4		5.4872E-07	104.33
SHGIWN(de)NTVFIFSTDNGGQTR	2350.1091	IPI0065235€	IPI0065235€	yes	no		3	0.0014195	84.208
SHPIHSPVN(de)WTSYASSVESTPTK	2511.203	IPI0012921€	IPI0012921€	yes	yes		3	2.7474E-08	117.38
SIAQYIHSPPVYFVIEEGYN(de)YSSR	2875.3817	IPI0013260€	IPI0013260€	yes	no		3	0.0037427	81.48
SIASEPTEKHFFN(de)VSDEIAIVTIVK	2773.4538	IPI00466371	IPI01026704	no	no		3	1.2096E-34	168.78
SIAYINSDSAIEGN(de)YTIR	1985.9694	IPI0011304€	IPI0011304€	yes	no		3	0.0013072	92.38
SICINGKWDPEPN(de)CTSK	2004.9033	IPI0013001€	IPI0013001€	yes	no	2,3		0.0002034	126.16
SIDAYPVINQAQAMEN(de)HTEVHFQK	2769.3181	IPI00468674	IPI00468674	yes	no	3,4		0.0001904	93.371
SIDEEAIKEN(de)NSIHWK	1911.9327	IPI0012322€	IPI0012322€	yes	no	2,3,4		1.0018E-97	218.6
SIDNDNYVFTAPYFN(de)K	1906.8737	IPI0062679€	IPI0062679€	yes	no		2	5.0708E-45	199.49
SIDNDNYVFTAPYFN(de)KSGPGAYESGIMVSK	3270.5179	IPI0062679€	IPI0062679€	yes	no		4	0.039619	47.616
SIFGAIPGN(de)R	1030.556	IPI0040007€	IPI0040007€	yes	yes		2	0.0001784	132.91
SIGEVN(de)FTATAEAIQSPEICGNK	2435.1639	IPI0062466€	IPI0062466€	yes	yes	2,3,4		2.2055E-20€	265.41
SIGEVN(de)FTATAEAIQSPEICGNKITEVPAIVHK	3522.8028	IPI0062466€	IPI0062466€	yes	yes	3,4,5		2.7303E-98	216.25
SIGEVN(de)FTATAEAIQSPEICGNKITEVPAIVHKDVTVK	4065.1092	IPI0062466€	IPI0062466€	yes	yes	3,4,5		7.2953E-11	92.449
SIGNVN(de)FSVSAEAQSSSEPCGSEVATVPETGRK	3421.6056	IPI0012322€	IPI0012322€	yes	yes	3,4,5		9.4747E-18€	215.36
SIGPN(de)TCSSNGSSYFIHGPNICYSSIDKINA	3834.7982	IPI00128484	IPI00128484	yes	yes		4	2.7311E-10	90.384
SIGPNTCSSN(de)GSSYFIHGPNICYSSIDKINA	3834.7982	IPI00128484	IPI00128484	yes	yes		4	2.7311E-10	90.384
SIIDHIVGVGRDN(de)VSQPK	2070.097	IPI0012342€	IPI0012342€	yes	no	2,3		3.8946E-25	172.93
SIIEFN(de)TTMGCQPSDSQHR	2206.9736	IPI00308971	IPI00308971	yes	yes	2,3		6.7329E-42	193.19
SIHIGSPTWKN(de)VSR	1669.9515	IPI0022571€	IPI0022571€	yes	yes		3	0.0002146	107.53
SIW(de)TETFMNKENQNHYSIK	2569.2271	IPI0012024€	IPI0012024€	yes	no		3	6.7197E-05	97.095
SIN(de)CTVK	820.41129	IPI0041718€	IPI0041718€	yes	no		2	1.5624E-17	143.61
SIN(de)GTFGGWK	1212.5928	IPI0013693€	IPI0013693€	yes	yes		2	0.009307	88.187
SIN(de)VTGQGFSSIQK	1490.8093	IPI0040574€	IPI0040574€	yes	no	2,3		6.4801E-32	189.3
SINGVIIPGGGAN(de)ITDSGYSR	2047.0334	IPI0012924€	IPI0012924€	yes	no		2	4.8003E-09	133.74
SIPNN(de)VTSFEVESIKPYK	2051.0575	IPI0032305€	IPI0032305€	yes	no	2,3		5.0467E-37	191.07
SIPPGIFSTSAN(de)ISTIVIR	1972.0993	IPI0012925€	IPI0012925€	yes	yes	2,3		3.2573E-33	185.99
SIPQSSWGN(de)WSSWK	1648.7634	IPI00118291	IPI00118291	yes	no		2	0.0031919	97.45
SIPVN(de)DSVIDVFER	1588.8097	IPI0012212€	IPI0012212€	yes	no	2,3		4.2187E-11	163.71
SIPVN(de)DSVIDVFERR	1744.9108	IPI0012212€	IPI0012212€	yes	no	2,3		4.6922E-06	143.93
SIQTSDQQNIKVPGN(de)ITSVIISNIVPR	3021.6459	IPI00221547	IPI00221547	yes	no		3	0.0005254	77.241
SISCQMAAFRGN(de)GSER	1769.7937	IPI00129677	IPI00129677	yes	no	2,3		0.0006923	121.99
SISPHAGTEPCPEAAVCIIN(de)GSKPVNIGK	3099.5481	IPI00308971	IPI00308971	yes	no	3,4		7.3214E-14	119.34
SITFN(de)ESYQDVSEVVYGA	2135.0059	IPI0013664€	IPI0013664€	yes	yes	2,3		0	340.42
SITHDTDGVAVFVINIPSN(de)VTVIK	2538.3694	IPI0033083€	IPI0033083€	yes	yes	2,3,4		8.0545E-36	177
SITQGSIIVGNIPVN(de)GTSQGK	2140.1488	IPI0051536€	IPI0051536€	yes	no	2,3		8.3264E-19€	283.55
SITVIIGAHN(de)K	1151.6663	IPI0023042€	IPI0023042€	yes	yes		2	3.8972E-06	147.91
SIYIIN(de)STR	1065.5819	IPI0031130€	IPI0031130€	yes	yes		2	0.016951	98.943
SKIDTEVAN(de)ISVMEEMK	2022.0013	IPI00129304	IPI00129304	yes	yes		3	3.0143E-60	209.89
SKN(de)ITIVEIPDEVIVPR	1921.0884	IPI0011883€	IPI0011883€	yes	yes		3	0.0005168	120.92
SMAGSGHN(de)VSQEAIAIK	1698.8359	IPI0031467€	IPI0031467€	yes	yes	2,3		2.7246E-08	142.39
SMAGSGHN(de)VSQEAIAIKR	1854.937	IPI0031467€	IPI0031467€	yes	yes	2,3		0.0002614	108.71
SMANQIITFN(de)ISSK	1552.7919	IPI0046760€	IPI0046760€	yes	yes	2,3		4.1277E-23	178.84

SMKITYN(de)ESR	1227.5918	IPI01008227	IPI01008227	yes	no		2	0.0034182	113.38
SN(de)ISIIR	801.47085	IPI00323134	IPI00323134	yes	no		2	1.9125E-05	111.82
SN(de)ITVIR	801.47085	IPI00377953	IPI00377953	yes	no		2	0.0086862	105.57
SN(de)VTRPSEFNWIPIPIFIK	2491.3264	IPI00319509	IPI00319509	yes	no	2,3,4		5.6682E-30	168.64
SN(de)YSVIDITPVAIIPK	1800.0033	IPI00225072	IPI00225072	yes	no	2,3		2.0189E-122	254.05
SNIDPSNVDSIFYAAQSSQVISGCEISVSN(de)ETK	3545.6468	IPI00475154	IPI00475154	yes	yes	3,4		2.5125E-12	114.8
SNKYSQ(de)AANSTKEIDDCEQANK	2500.1136	IPI00187353	IPI00187353	yes	yes		4	2.7224E-11	137.73
SPDKETFTCWNPWPGSDGGIPTN(de)YSITYSK	3307.4768	IPI00321091	IPI00321091	yes	no		3	0.0001025	89.039
SPFYN(de)ISDQISFQCYDGYVIR	2571.174	IPI00114065	IPI00114065	yes	no		3	0.0050065	72.772
SPGAQDN(de)VSQSQGM	1531.7049	IPI00348586	IPI00348586	yes	no	2,3		3.9585E-44	203.87
SPMQWDN(de)SSNAGFTEANHTWIPTNSDYHTVNVVDVQK	4089.8188	IPI00128432	IPI00128432	yes	yes		4	0.0054541	44.021
SPMQWDNSSNAGFTEAN(de)HTWIPTNSDYHTVNVVDVQK	4089.8188	IPI00128432	IPI00128432	yes	yes		4	0.0054541	44.021
SPN(de)DSEAWHQK	1297.5687	IPI00153644	IPI00153644	yes	yes	2,3		0.01659	81.625
SPPAPPQPQPISPIHPIGICN(de)DSEVIAVAGFAIQNINR	4042.1211	IPI00469387	IPI00469387	yes	yes		4	2.0414E-08	79.917
SPVIGQPNTIICFVDNIFPPVIN(de)ITWIR	3335.8104	IPI00172039	IPI00172039	yes	no		4	0.0038696	56.172
SPVNIGE(de)PNIIICFIDKFSPPVVNVTVIR	3323.774	IPI00110808	IPI00110808	yes	no		4	0.010116	57.145
SQITISNIDVNDPGTYVCN(de)ATNAQGTTR	3108.4782	IPI00408495	IPI00408495	yes	no	2,3		7.3906E-202	193.53
SQIVNETHWQY(de)YGTSDTR	2183.9872	IPI00749655	IPI00749655	yes	no	2,3		1.8089E-21	173.21
SQN(de)DTVTPDVWYTSKPEKK	2222.0855	IPI00471238	IPI00471238	yes	yes		3	1.0355E-05	127.3
SQNDKFN(de)VSITVK	1478.7729	IPI00466371	IPI01026704	no	no	2,3		7.5471E-275	225.32
SQSPSIMYTINGFVN(de)K	1784.8767	IPI00406603	IPI00406603	yes	yes	2,3		1.303E-25	181.51
SR(de)TNITSIIVQPISPSIVK	2052.1943	IPI00985989	IPI00985989	yes	no		3	4.5958E-09	144.3
SRYPHKPE(de)INSTTHPGADIK	2247.1396	IPI00114206	IPI00114206	yes	yes	2,3		3.9643E-20	166.52
SSAN(de)QSEFQQQIQK	1621.7696	IPI00990932	IPI00990932	yes	no		2	4.2063E-16	170.49
SSIRN(de)GTEVVVSCHPQGGSTAGVVYR	2560.2452	IPI00674255	IPI00674255	yes	yes		3	6.2182E-08	109.37
SSQSN(de)QTIWFGHFTTSTIMSPSPGIR	2866.3708	IPI00226714	IPI00226714	yes	no		3	0.010277	64.589
SSSHIPPSSYFN(de)ASGR	1692.7856	IPI00130661	IPI00130661	yes	yes	2,3		3.1373E-102	247.93
SSSYHENDMENPQSN(de)ITMVYIPIGPK	3063.4318	IPI00406603	IPI00406603	yes	yes		3	1.9242E-16	130.3
SSTEN(de)TSAEIHVIGR	1599.7853	IPI00330594	IPI00330594	yes	yes	2,3		1.5187E-70	226.93
SSVEIIN(de)STQAPMR	1531.7664	IPI00120166	IPI00120166	yes	yes		2	2.7964E-05	140.1
STFYTCQVSNPVSSKN(de)DTVYFTIPCDIAR	3369.5646	IPI00109946	IPI00109946	yes	yes		3	5.1449E-41	171.5
STGKPTIYNVSI(de)MSDTGGTCY	2364.0977	IPI00468055	IPI00468055	yes	yes		2	1.0652E-222	299.71
STIIHHPQYAWIQDIGIREDNEGVYN(de)GSWGR	3780.8397	IPI00230084	IPI00230084	yes	no		4	4.3379E-06	66.925
STTQTN(de)SSDSHIVK	1503.7165	IPI00111807	IPI00111807	yes	no	2,3		0.0010583	109.44
SVAFQDCQVN(de)ITIEGR	1835.8836	IPI00173181	IPI00173181	yes	no		2	5.9126E-86	233.37
SVAPCTDFFSFACAN(de)GTSDSFQAITEENK	3457.5079	IPI00111137	IPI00111137	yes	yes		4	0.01784	51.052
SVCDEPEYVN(de)VTAEDIDGAQNSAPFSFSIIDQPPGTAQK	4195.9168	IPI00115793	IPI00115793	yes	yes		4	0.0008917	51.975
SVGIPVICIN(de)ATDDVFSHPAIIPIETAK	2950.511	IPI00131173	IPI00131173	yes	yes		3	1.2338E-13	117.21
SVGTGTNMVFQN(de)CSCIGSSGNSSAVIGICK	3091.3831	IPI00625835	IPI00625835	yes	no	3,4		8.2061E-36	160.88
SVGTGTNMVFQNCSCIGSSGN(de)SSAVIGICK	3091.3831	IPI00625835	IPI00625835	yes	no	3,4		8.2061E-36	160.88
SVIEN(de)TTSYEEAK	1469.6886	IPI00125266	IPI00125266	yes	yes		2	0.0004997	125.97
SVIEN(de)TTSYEEAKNTITK	2027.0059	IPI00125266	IPI00125266	yes	yes	2,3		3.3605E-123	258.9
SVN(de)ISEIIDVYSDGVEIIQIVK	2432.305	IPI00466999	IPI00466999	yes	no		3	4.8646E-208	198.49
SVNINFN(de)ITHR	1313.684	IPI00118291	IPI00118291	yes	no		2	0.0005279	114.72
SVVHHIN(de)GSTIR	1318.7106	IPI00758066	IPI00758066	yes	no	2,3		0.010059	84.718
SVYN(de)CSGEACSGHNR	1696.6682	IPI00314726	IPI00314726	yes	yes	2,3		4.697E-44	203.11
SWSTVGN(de)CTAAIR	1421.6721	IPI00128484	IPI00128484	yes	yes		2	6.3883E-05	145.1
SWVQGN(de)ITACGR	1347.6354	IPI00153389	IPI00153389	yes	no		2	0.00125	107.99
SYCKNGVN(de)GTGENGR	1611.706	IPI00132474	IPI00132474	yes	yes	2,3		6.3484E-08	155.66
SYCKNGVN(de)GTGENGRK	1739.8009	IPI00132474	IPI00132474	yes	yes	2,3		1.9791E-101	247.93
SYIDDRPIQHYIAVSSPTN(de)TTYVVQYAIANITGK	3797.9265	IPI00118674	IPI00118674	yes	yes	3,4		8.672E-06	76.002
SYIDDRPIQHYIAVSSPTNTTYVVQYAIAN(de)ITGK	3797.9265	IPI00118674	IPI00118674	yes	yes	3,4		8.672E-06	76.002
SYIFIYDGNKN(de)STTTDQNFSAK	2614.2187	IPI0012483C	IPI0012483C	yes	no	2,3		5.0742E-30	154.84
SYIFIYDGNKNSTTTDQN(de)FTSAK	2614.2187	IPI0012483C	IPI0012483C	yes	no	2,3		5.0742E-30	154.84
TAADATGIQPIINQFTPAN(de)VSR	2284.1812	IPI00120245	IPI00120245	yes	no	2,3		4.9552E-101	235.92
TAASIIWQAYPIIN(de)ISEK	2017.0884	IPI00115867	IPI00115867	yes	yes	2,3		2.2573E-28	178.51
TADCDDNQPGAICYYPGN(de)ETEEEV	2902.1658	IPI00129253	IPI00129253	yes	yes		3	0.017511	53.998
TADIIQN(de)ITGR	1200.6463	IPI00112614	IPI00112614	yes	yes		2	0.0012207	107.09
TAFAPPDIPVCIIGN(de)R	1739.9029	IPI00331175	IPI00331175	yes	no		3	1.3234E-05	134.21
TAGAN(de)GTSGFVCVDEGGIPIAQR	2324.0855	IPI00282289	IPI00282289	yes	no	2,4		3.3019E-12	137.89
TAGWNIPMGIAN(de)QTR	1741.8934	IPI00323235	IPI00323235	yes	yes	2,3		1.7705E-07	143.97
TAIFPDIIVQGN(de)ASIR	1713.9414	IPI00124078	IPI00124078	yes	yes	2,3		4.1489E-13	161.91
TAIVQEVHQN(de)FSAWCSQVIR	2372.1695	IPI00381303	IPI00381303	yes	yes	2,3		5.4094E-80	227.46
TAIWWATDHNTDN(de)TSAIIR	2098.0443	IPI0016987C	IPI0016987C	yes	yes	2,3		5.9652E-65	209.23
TAN(de)ETSAEAYNIIR	1664.837	IPI0040001E	IPI0040001E	yes	no		3	3.1278E-05	130.61
TANDAIQDMICDMEGIPQKHN(de)FSHCCGK	3276.3879	IPI00130654	IPI00130654	yes	no		4	2.1389E-26	150.14
TASVSIN(de)QTEPPK	1370.7042	IPI0012922C	IPI0012922C	yes	yes		2	0.0035498	96.591
TASVSIN(de)QTEPPKVR	1625.8737	IPI0012922C	IPI0012922C	yes	yes	2,3		1.9348E-43	200.55
TCNPETFPIRN(de)ESIQCPTAR	2390.1107	IPI0064918E	IPI0064918E	yes	no		3	0.0016708	89.468
TCPAGIMGEN(de)NTIVVWK	1789.8491	IPI0012119C	IPI0012119C	yes	no	2,3		2.6169E-119	251.84
TCPIDEFQCN(de)NTICKPIAWK	2494.1443	IPI00119063	IPI00119063	yes	yes	2,3		1.7263E-25	172.93
TCVSN(de)CTASQFVCK	1660.7007	IPI00119063	IPI00119063	yes	yes	2,3		3.7389E-55	214.18
TCVSN(de)CTASQFVCKNDK	2017.8656	IPI00119063	IPI00119063	yes	yes		2	0.0060977	86.367
TDAEIN(de)ETARPISPVPNK	1951.0011	IPI00408895	IPI00408895	yes	yes		2	0.0008414	97.081
TDDEVVQREEEAIQIDGIN(de)ASQIR	2727.3311	IPI0012952E	IPI0012952E	yes	yes	2,3,4		7.5768E-109	235.98
TDPANQFEWIENTIN(de)SSIWNK	2506.1765	IPI00136259	IPI00136259	yes	yes		3	0.0011933	82.765
TDPANQFEWIENTIN(de)SSIWNKEK	2763.314	IPI00136259	IPI00136259	yes	yes		4	0.017218	65.784
TEAGVFEYVADPTFEN(de)FTGGVK	2377.1114	IPI00405742	IPI00405742	yes	no	2,3		3.1995E-60	207.76
TEAGVFEYVADPTFEN(de)FTGGVVK	2505.2064	IPI00405742	IPI00405742	yes	no	2,3,4		1.7508E-86	226.57
TEGMIIN(de)VTSSIR	1419.7392	IPI00109254	IPI00109254	yes	yes		2	0.0005589	121.45
TEIDIRPQGIAIFSN(de)VSEAR	2215.1597	IPI00122973	IPI00122973	yes	no	2,3		4.3876E-33	185.85
TEKDPQNDPVGTCYISTEN(de)FTR	2571.1547	IPI0011597E	IPI0011597E	yes	yes	2,3		3.4388E-30	168.81
TEQIIQAPN(de)TSVHIYEPYPAGADVPPFPINK	3575.83	IPI0013260C	IPI0013260C	yes	no	3,4,5		1.5745E-99	218.86
TEVIIQGTVSPN(de)ASAPDAVWEDYEFK	2865.3709	IPI00405437	IPI00405437	yes	no		4	0.0053671	61.437
TEVKPVATEQIISTFITVGN(de)NTCFYGK	3016.5216	IPI00122494	IPI00122494	yes	yes	3,4		2.8267E-13	121.39
TEVSNNNVIIYIDQVTN(de)QTIAFSFIQQDIPVR	3791.9734	IPI00123223	IPI00123223	yes	yes	3,4		1.7618E-49	173.59



TFHETIN(de)CCGSNAITTTITIR	2623.2734	IPI0031091E	IPI0031091E	yes	no		3	5.7041E-08	109.85
TFN(de)VSEDTKVNTPVETQIK	2363.222	IPI00314132	IPI00314132	yes	no		3	0.000124	96.391
TFNVSEDTKVN(de)TTVIPETQIK	2363.222	IPI00314132	IPI00314132	yes	no		3	0.000124	96.391
TFPGETN(de)VTIQIWESEGR	2062.996	IPI00355482	IPI00355482	yes	yes	2,3		5.4825E-06	127.29
TGATNTWIFPGSCNGN(de)ETTFWQCK	2776.201	IPI0076010E	IPI0076010E	yes	no		3	0.0019014	76.049
TGDGSN(de)VTSNFTKDPSIIPEIIPGVSYTVK	3248.6816	IPI0046942E	IPI0046942E	yes	no		3	4.2442E-08	103.14
TGDGSNVTSN(de)FTKDPSIIPEIIPGVSYTVK	3248.6816	IPI0046942E	IPI0046942E	yes	no		3	4.2442E-08	103.14
TGEAN(de)ITQIYTQEAFIQTHAR	2747.3515	IPI0031009C	IPI0031009C	yes	no	3,4		2.5582E-14	257.96
TGEIFTFN(de)TTAAQPQYFK	2063	IPI00330714	IPI00330714	yes	no		2	8.5579E-237	302.96
TGEIFTFN(de)TTAAQPQYFKYEPDGVDSVIVK	3511.7188	IPI00330714	IPI00330714	yes	no	3,4		3.0056E-40	157.9
TGEIN(de)ITSIVDR	1316.6936	IPI0038046C	IPI0038046C	yes	no		2	3.5456E-06	150.22
TGHRPPNPAFWVN(de)GSGTEVK	2336.145	IPI0022155E	IPI0022155E	yes	no		3	7.7407E-16	150.69
TGHTNAHGK(de)DIDTDFTSNASQPETK	2671.211	IPI0013057E	IPI0013057E	yes	yes		3	5.4924E-08	108.08
TGTIAIQN(de)TTQIR	1415.7732	IPI00623114	IPI00623114	yes	no		2	2.388E-06	150.34
TGVHDGDFEYN(de)ITTTIAANK	2279.107	IPI0010884E	IPI0010884E	yes	no		3	5.8974E-09	130.39
TGVNSGVMIMN(de)MTR	1509.7102	IPI00856861	IPI00856861	yes	no		2	0.0022293	95.236
TIAGEN(de)QTAIEIEEINR	1899.9538	IPI0040001E	IPI0040001E	yes	no		3	1.3668E-10	242.19
TIAGEN(de)QTAIEIEEINRK	2028.0487	IPI0040001E	IPI0040001E	yes	no		3	0.0066237	82.59
TIEDIIFRAEN(de)R	1475.7732	IPI00122312	IPI00122312	yes	no		3	0.015607	93.096
TIEQERN(de)ASFVYTK	1684.842	IPI0012322E	IPI0012322E	yes	no	2,3		8.1568E-23	182.1
TIGISPFHEFADVFTAN(de)DSGHR	2516.2084	IPI0012756C	IPI0012756C	yes	yes	2,3,4		1.5898E-13E	245.78
TIIGYYN(de)QSAGGHTIQWMYGCDVGS DGR	3206.4186	IPI0010999E	IPI0010999E	yes	yes		3	2.8558E-07	105.17
TIIGYYN(de)QSESGSHTIQWMYGCK	2722.2156	IPI00608044	IPI00608044	yes	no		3	1.4351E-31	175.33
TIIN(de)TSCDNMIMAIK	1723.8307	IPI00224654	IPI00224654	yes	yes		2	0.0002073	118.33
TIIPAAAQDVYYRDEIGN(de)VSTSHIIIDDSVEMEIRPR	4299.1845	IPI0030903E	IPI0030903E	yes	yes	4,5,6		1.6377E-05	65.33
TIISYYN(de)QSAGGSHTIQVISGCEVGS DGR	3055.4305	IPI00474494	IPI00474494	yes	no		3	2.4401E-33	160
TIIVDN(de)NTWNNTHISR	1896.9442	IPI0010910E	IPI0010910E	yes	yes	2,3		0	265.77
TIIVDNNTWN(de)NTHISR	1896.9442	IPI0010910E	IPI0010910E	yes	yes	2,3		0	265.77
TIKPNPAKDPVGTVCYVAIQN(de)FSAYAEHSPCR	3490.6762	IPI00345112	IPI00345112	yes	no	4,5		4.2095E-06	84.529
TIMS A EANIAGIFPPNEVQHFNPN(de)ISWQPIPVHTVPITEDR	4579.2958	IPI0015405E	IPI0015405E	yes	no	4,5		1.2566E-25	121.1
TIN(de)WSAAEPGAWATK	1601.7838	IPI0033144C	IPI0033144C	yes	no	2,3		2.77E-06	143.28
TIPHHQYN(de)ATINK	1535.7845	IPI0034826E	IPI0034826E	yes	yes		2	0.00879	84.173
TIPHPDITHIPPPSPPTIN(de)NTSISR	2788.4508	IPI0040660E	IPI0040660E	yes	yes		3	1.3952E-05	88.09
TIPHPDITHIPPPSPPTINN(de)TSISR	2788.4508	IPI0040660E	IPI0040660E	yes	yes		3	1.3952E-05	88.09
TISDVPSAAPQN(de)ISIEVR	1895.9953	IPI0012915E	IPI0012915E	yes	no	2,3		2.2644E-48	203.53
TITIIN(de)VTR	1029.6182	IPI0010853E	IPI0010853E	yes	no		2	5.2923E-07	155.11
TITIIN(de)VTRNDTGPYVCETR	2322.1638	IPI0010853E	IPI0010853E	yes	no	2,3		8.2546E-65	212.72
TITIINVTRN(de)DTGPYVCETR	2322.1638	IPI0010853E	IPI0010853E	yes	no	2,3		8.2546E-65	212.72
TITVYN(de)FSAPVITISQIEVSEGSQVTVK	3009.591	IPI0012297E	IPI0012297E	yes	no	3,4		1.3737E-90	217.65
TIYN(de)WSGYPIIVHK	1689.8879	IPI00471081	IPI00471081	yes	yes	2,3		6.9089E-11	161.04
TKQHGFQFSIAVVGIN(de)ITSIGIR	2338.3121	IPI0012119C	IPI0012119C	yes	no		3	1.3603E-07	120.4
TKTQVFGPVDPT(de)VNTTYAFFNTFFK	2869.4327	IPI0011553C	IPI0011553C	yes	yes	3,4		4.8699E-56	192.27
TMVFPVMIYN(de)ESVIIDK	1998.0206	IPI00127447	IPI00127447	yes	yes	2,3		7.1031E-12	155.2
TMVFPVMIYN(de)ESVIIDKETANQIK	2782.4285	IPI00127447	IPI00127447	yes	yes	3,4		2.5472E-16	145.43
TN(de)HTVMTMGSDFH YENANMWFK	2660.1246	IPI0038130E	IPI0038130E	yes	yes		3	0.012601	59.585
TN(de)ITSIIVQPISPSIVK	1809.0612	IPI0098598E	IPI0098598E	yes	no		3	2.5858E-05	127.83
TN(de)KSEMWDVFCYR	1734.7494	IPI0046760C	IPI0046760C	yes	no		3	0.010711	95.417
TN(de)SSFIQGFVDHVK	1577.7838	IPI0032119C	IPI0032119C	yes	no	2,3		2.0044E-23	183.96
TN(de)SSFIQGFVDHVKEDCDR	2253.012	IPI0032119C	IPI0032119C	yes	no	3,4		0.0001145	114.52
TN(de)SSFIQGFVDHVKEDCDRIGPGVSDICK	3279.5289	IPI0032119C	IPI0032119C	yes	no	3,4		3.418E-09	113.6
TNIEGQVPFIPAN(de)FTAHTPYK	2457.2692	IPI0012990E	IPI0012990E	yes	yes		3	7.8055E-23	162.42
TNIEGQVPFIPAN(de)FTAHTPYKEYFYHR	3352.6669	IPI0012990E	IPI0012990E	yes	yes	3,4		0.0001679	88.836
TNQ(de)SCEIVIDSTEVNPSYIGR	2509.2119	IPI0031005E	IPI0031005E	yes	no		3	0.0001371	95.414
TPASDPHGDN(de)ITYSVFYTK	2111.98	IPI0012915E	IPI0012915E	yes	no	2,3		6.4114E-05	103.88
TPIHYFDSQCMGAMHWQVMHN(de)VTTETK	3248.43	IPI0034983C	IPI0034983C	yes	no		4	0.0079914	52.79
TPTIPPVSFHIGGVWFN(de)ITGQDYVIK	2885.5116	IPI00113797	IPI00113797	yes	yes	3,4		4.6568E-21	148.04
TQDSIIQAETQANSCN(de)ITVVTIQESIEK	3119.5292	IPI00321222	IPI00321222	yes	yes		3	6.1517E-05	88.413
TQDSIIQAETQANSCN(de)ITVVTIQESIEKK	3247.6242	IPI00321222	IPI00321222	yes	yes	3,4		3.9934E-51	182.67
TQITCSIN(de)SSGVDIVGHR	1942.9531	IPI0040849E	IPI0040849E	yes	no	2,3		1.0071E-21C	298.93
TQMVFFN(de)ITPNIINDTMEIR	2396.1868	IPI0012785E	IPI0012785E	yes	yes	2,3		2.9686E-42	192.25
TQMVFFNITPNIIN(de)DTMEIR	2396.1868	IPI0012785E	IPI0012785E	yes	yes	2,3		2.9686E-42	192.25
TQVFGPVDPTVN(de)TTYAFFNTFFK	2640.29	IPI0011553C	IPI0011553C	yes	yes	2,3		4.831E-60	204.21
TQYACPPFN(de)VTECSVQDAAGNSIDISSIR	3286.4871	IPI00308971	IPI00308971	yes	yes		3	0.0005711	63.893
TSDTGEEEAITN(de)STEANGK	1952.8447	IPI0040849E	IPI0040849E	yes	no	2,3		8.8236E-30C	328.92
TSDTGEEEAITN(de)STEANGKYVVVSTPEK	2955.3833	IPI0040849E	IPI0040849E	yes	no	3,4		8.7055E-10E	229.1
TSIDIWMHTDPMSQKN(de)ESVK	2346.0984	IPI00118674	IPI00118674	yes	yes		3	0.0013559	89.484
TSIDWWTTDTCNMIN(de)GTDGDSFHPIISK	3211.4227	IPI00127447	IPI00127447	yes	yes		3	1.1316E-63	197.92
TSIDWWTTDTCNMIN(de)GTDGDSFHPIISKDEVIIYIFPSDICR	4819.188	IPI00127447	IPI00127447	yes	yes		4	0.04434	38.376
TSIIVIN(de)NTESNIEDFIQSIK	2377.2377	IPI0017014E	IPI0017014E	yes	yes	2,3		6.0994E-17E	260.24
TSPFSIN(de)DSVIIIEIAYNPAK	2436.206	IPI0039675E	IPI0039675E	yes	no		3	2.0808E-05	98.443
TSRPTDNSIN(de)VTCGPPYETNGPK	2504.1602	IPI0032305E	IPI0032305E	yes	no		3	1.6456E-08	126.26
TSSEFCQPVS IHGSN(de)HTSK	2101.9487	IPI00894972	IPI00894972	yes	no		3	2.5778E-06	128.99
TSYCN(de)ESFYFICK	1717.7116	IPI0012618E	IPI0012618E	yes	yes	2,3		6.6804E-42	201.48
TSYCN(de)ESFYFICKK	1845.8066	IPI0012618E	IPI0012618E	yes	yes	2,3		0.0003616	116.84
TTIVDN(de)NTWNNSHIAIVGK	2096.0651	IPI0031646E	IPI0031646E	yes	yes	2,3		0	360.07
TTIVDNNTWN(de)NSHIAIVGK	2096.0651	IPI0031646E	IPI0031646E	yes	yes	2,3		0	360.07
TTPIQIN(de)ETENTEQDDIPADCSAVYNR	3190.4361	IPI0012820E	IPI0012820E	yes	yes		4	0.0001484	80.082
TTVKN(de)ITVIEPVTQPFIVTNTTVK	2770.548	IPI0010853E	IPI0010853E	yes	no	2,3,4		8.3591E-45	186.13
TTVKNITVIEPVTQPFIVTN(de)TTVK	2770.548	IPI0010853E	IPI0010853E	yes	no	2,3,4		8.3591E-45	186.13
TVAN(de)JSGCEATDSEAIHCIR	2316.0838	IPI0015404E	IPI0015404E	yes	yes	2,3,4		0	264.03
TVDKSTGKPTIYN(de)VSIIIMSDTGTCY	2807.3357	IPI0046805E	IPI0046805E	yes	yes		3	1.38E-56	195.39
TVIDKNGDAYGYNN(de)DSIK	2034.9535	IPI00471081	IPI00471081	yes	yes	2,3		5.1554E-28	183.7
TVNSIN(de)VSAISIEHDEADDISDENREK	3096.4483	IPI0012137E	IPI0012137E	yes	no		3	2.455E-51	186.92
TVSTIVQAAN(de)VSAIYK	1776.9986	IPI0012432E	IPI0012432E	yes	no	2,3		1.3695E-68	174.59
TVVAPSTEGGIN(de)ITSTFIR	1962.0422	IPI00114252	IPI00114252	yes	no	2,3		1.6176E-13	148.38
TVVQYSPNIIFSGIEIQKDSCESNQN(de)ITCR	3628.7138	IPI00466371	IPI00466371	no	no	3,4		6.8054E-22	128.17

TVVTEAGNIIKDN(de)ATQEEIIHYIEK	2827.4604	IPI0032119C IPI0032119C	yes	no	2,3,4	2.4056E-20€	284.98
TWSPPFESDDSQKHN(de)QSEYDDSASECCSCP	3677.4253	IPI0012835E IPI0012835E	yes	no		4 9.4937E-05	71.882
TYADDVNSEIVNIYTFN(de)HTVTR	2571.2241	IPI00330714 IPI00330714	yes	no	2,3	1.1852E-197	284.65
TYAVYDIFDTAMINN(de)SR	1992.9251	IPI0022679C IPI0022679C	yes	no		3 2.7404E-28	185.67
TYCANEPISN(de)CSQVNR	1911.8203	IPI0012777C IPI0012777C	yes	yes		2 0.0015314	102.08
TYCANEPISNCSQVN(de)R	1911.8203	IPI0012777C IPI0012777C	yes	yes		2 0.0015314	102.08
TYEN(de)GSSVEYR	1303.5681	IPI00122117 IPI00122117	yes	yes		2 0.0036736	99.215
TYNVIDMKN(de)TTCQDIQIEVK	2412.1665	IPI00131091 IPI00131091	yes	no		3 1.2623E-32	180.64
VAEVEN(de)GTKPDSVPEHCIDTWSFDAATMDHNGTMIFFK	4410.9508	IPI00128484 IPI00128484	yes	yes		4 7.0367E-40	110.43
VAEVENGTKPDSVPEHCIDTWSFDAATMDHN(de)GTMIFFK	4410.9508	IPI00128484 IPI00128484	yes	yes		4 7.0367E-40	110.43
VAGIIVIN(de)YSNDYNHWIATK	2290.1746	IPI0011190E IPI0011190E	yes	no	2,3	1.1135E-25	173.98
VAN(de)ITVVVNSIDGK	1427.7984	IPI00310797 IPI00310797	yes	yes		2 1.8642E-11	166.04
VAQPGINYAIGTN(de)TSYPNNIIR	2375.2234	IPI0022636C IPI0022636C	yes	no	2,3	1.4232E-48	193.8
VCIPRDPCITNFGGCPN(de)STFCIYR	2990.3296	IPI0098726E IPI0098726E	yes	no		3 4.0005E-57	198.24
VCNGIG(de)IGEFKDTISINATNIK	2363.2155	IPI0012119C IPI0012119C	yes	no		3 3.7155E-22	162.42
VDEMPQHAVISGNIFINNIN(de)KTDNGTYR	3371.6205	IPI0085672E IPI0085672E	yes	no	3,4	4.2789E-05	91.416
VDEMPQHAVISGNIFINNINKTDN(de)GTYR	3371.6205	IPI0085672E IPI0085672E	yes	no	3,4	4.2789E-05	91.416
VDFIWHPEVN(de)GSMK	1657.7923	IPI0038029E IPI0038029E	yes	yes		3 0.0039232	92.856
VDIEDFEN(de)NTAYAK	1627.7366	IPI0055116E IPI0055116E	yes	no		2 9.8875E-13€	266.2
VDIPQQPMGIIAVANDTN(de)SCEISPCR	2884.3517	IPI0011906E IPI0011906E	yes	yes	3,4	7.6468E-13	123.32
VDIPQQPMGIIAVANDTN(de)SCEISPCR	2884.3517	IPI0011906E IPI0011906E	yes	yes	3,4	7.6468E-13	123.32
VDIVIVAN(de)ITVTDKQPHTPAWNAAYR	2893.4723	IPI00323134 IPI00323134	yes	no	3,4	2.1293E-08	111.6
VEFDDKGNVITSYGNPIIIN(de)SSIPEDATIK	3248.6453	IPI00122257 IPI00122257	yes	no	3,4	9.6655E-14	116.99
VEN(de)GSETGPIPEIQPIIEGEVK	2431.2482	IPI00136012 IPI00136012	yes	yes		3 3.6885E-08	114.75
VETGVIKPGMVVTFAPVN(de)VTTEVK	2514.3767	IPI00307837 IPI00307837	yes	yes	2,3,4	8.5352E-16	142.04
VFDIHQNMGSVN(de)VSVGCTPAQIIETSR	2958.4328	IPI0011691E IPI0011691E	yes	no		3 1.4822E-38	175.42
VFGSQN(de)ITTVK	1192.6452	IPI0012334E IPI0012334E	yes	yes		2 1.2347E-41	203.51
VFHIHN(de)ESWVIITPK	1818.9781	IPI0022475E IPI0022475E	yes	yes	2,3	9.9846E-85	232.5
VFIVPVGN(de)HSNIPFSR	1781.9577	IPI0022141E IPI0022141E	yes	no	2,3	2.35E-57	209.6
VFKPQSGADAIN(de)DSQDFPFETPAK	2705.2973	IPI0046246E IPI0046246E	yes	no	3,4	1.6003E-161	261.26
VFKTN(de)STQVSDVR	1479.7682	IPI0046942E IPI0046942E	yes	no	2,3	0.001595	119.88
VFNGKDN(de)ISK	1120.5877	IPI00331214 IPI00331214	yes	yes		2 0.0013733	123.51
VFPYISAMVNN(de)GSISYDHER	2298.0739	IPI0083035E IPI0083035E	yes	no	2,3,4	1.732E-05	111.57
VFPYISVMVNN(de)GSISYDHSK	2256.0885	IPI00321634 IPI00321634	yes	yes	2,3,4	1.8256E-33	185.33
VFPYISVMVNN(de)GSISYDHSKDGR	2584.238	IPI00321634 IPI00321634	yes	yes	2,3,4,5	1.7499E-07	107.72
VFVYTPPTN(de)YTIR	1573.814	IPI0012442E IPI0012442E	yes	yes		2 0.0025397	108.56
VGAFFGIFNVAVMN(de)ISGNCIR	2285.1449	IPI00988164 IPI00988164	yes	no		3 2.401E-62	152.32
VGFTGTMPATN(de)VSIFINNTQISDTGTYQCIVNNIPDR	4057.9514	IPI00172354 IPI00172354	yes	no		4 1.5754E-12	98.94
VGFTGTMPATNVSIFIN(de)NTQISDTGTYQCIVNNIPDR	4057.9514	IPI00172354 IPI00172354	yes	no		4 1.5754E-12	98.94
VGIVTYSN(de)ETR	1237.6303	IPI0085510E IPI0085510E	yes	no		2 0.009307	88.187
VGNVECGEGHFCHDN(de)QTCKK	2406.9198	IPI0012464C IPI0012464C	yes	yes		3 9.867E-07	130.11
VGQPEIKPMRN(de)ECNSEESSCPFR	2750.2211	IPI00111794 IPI00111794	yes	no		3 0.018334	66.325
VGVNKN(de)QTVTATFGYPPFR	1998.0323	IPI0011425E IPI0011425E	yes	no	2,3,4	3.8778E-74	220.64
VHGPN(de)ASHYTSIMTMITWER	2330.0936	IPI00169617 IPI00169617	yes	yes		3 5.9334E-05	97.095
VHSGN(de)FSTIPQYFK	1623.8045	IPI01023131 IPI01023131	yes	no		2 0.0144	77.42
VIDIWDIAQSAN(de)FTEK	1848.9258	IPI00469307 IPI00469307	yes	no	2,3	1.5685E-09	153.75
VIEEFYN(de)QTNWHR	1734.8114	IPI00308691 IPI00308691	yes	no		3 0.003539	96.64
VIEPKN(de)VSCETR	1559.7614	IPI00118291 IPI00118291	yes	no		2 0.0014367	116.51
VIENEKFDTHEYHN(de)ESR	2145.9716	IPI0046349E IPI0046349E	yes	yes		3 0.0010962	110.35
VIETIPAN(de)YSINSSK	1634.8516	IPI0048053E IPI0048053E	yes	no	2,3	3.4477E-05	129.77
VIFKN(de)YSINDATITIHNGFSDSGK	2753.4024	IPI00471187 IPI00471187	yes	no		3 1.2959E-161	263.09
VIFYKDDAMVYN(de)VTSR	1919.9451	IPI00406901 IPI00406901	yes	no	2,3	3.9913E-09	154.07
VIIIGN(de)ESCTITISESTTNTIK	2280.1519	IPI0013042C IPI0013042C	yes	no		3 7.1494E-09	128.99
VIIIDPAISGN(de)ETEPYPAFTR	2415.2686	IPI0084869E IPI0084869E	yes	yes	2,3,4	2.7099E-101	237.76
VIIN(de)ITVAANHGTYK	1713.9414	IPI0046760C IPI0046760C	yes	no	2,3	5.0063E-05	130.47
VIIQSQPIGTIKHN(de)MTYFCK	2490.3127	IPI0010800E IPI0010800E	yes	no	3,4	0.0072142	76.713
VIIRPYITPNNQGIYIFQGN(de)STVR	2762.4868	IPI0031950E IPI0031950E	yes	yes	2,3,4	1.4292E-79	211.17
VIKDAVNN(de)ITAK	1284.7402	IPI0062679E IPI0062679E	yes	no		3 0.011952	101.89
VIN(de)DTWAWK	1131.5713	IPI0012334E IPI0012334E	yes	yes		2 0.027883	91.584
VIN(de)DTWAWKNATIAEQAK	2058.0534	IPI0012334E IPI0012334E	yes	yes		2 5.552E-123	258.9
VIN(de)ITDNTYFK	1326.682	IPI00130117 IPI00130117	yes	yes		2 0.0065639	92.866
VINADQGSATVQMIIN(de)DTCPIFVR	2762.3731	IPI0032006E IPI0032006E	yes	yes	2,3,4	1.9915E-45	185.71
VINDTWAWKN(de)ATIAEQAK	2058.0534	IPI0012334E IPI0012334E	yes	yes		2 5.552E-123	258.9
VINEECKEN(de)ESINIAAR	1987.9633	IPI00122411 IPI00122411	yes	yes		2 2.2117E-27	180.88
VIPFN(de)VTDYCQIVR	1722.8763	IPI0082822E IPI0082822E	yes	no	2,3	1.9393E-11€	251.3
VIPSSQPPISCSEEGVGN(de)ATISVPMGEECVR	3285.5316	IPI0089537E IPI0089537E	yes	no		4 5.063E-05	69.284
VIQVVN(de)VTK	998.61243	IPI0035548E IPI0035548E	yes	yes		2 0.0057508	109.66
VISIAQAHSIN(de)FSCEQVR	2058.0317	IPI0030899C IPI0030899C	yes	yes	2,3	4.7892E-06	132.13
VISN(de)NCTSYGVIDIGK	1738.856	IPI00331214 IPI00331214	yes	yes	2,3	8.6124E-26	184.22
VISNN(de)CTSYGVIDIGK	1738.856	IPI00331214 IPI00331214	yes	yes	2,3	8.6124E-26	184.22
VITIAN(de)FTTK	1106.6336	IPI00109727 IPI00109727	yes	yes		2 0.033601	77.64
VITIAN(de)FTTKDEGDYFCEIQVSGANPMSSNK	3435.5963	IPI00109727 IPI00109727	yes	yes		4 6.5437E-08	97.94
VITIANFTTKDEGDYFCEIQVSGANPMSSN(de)K	3435.5963	IPI00109727 IPI00109727	yes	yes		4 6.5437E-08	97.94
VITMANQVITVN(de)ISEEGR	1973.0252	IPI0098726E IPI0098726E	yes	yes		3 1.5899E-16	166.48
VITNQESPYQN(de)HTGR	1742.8336	IPI0012531C IPI0012531C	yes	no	2,3	4.5903E-18	177.04
VIVAPPSEAN(de)TTK	1454.7617	IPI0087541E IPI0087541E	yes	no		2 0.0091963	82.102
VIVIITDGEASDKGN(de)ISAAHDITR	2494.3027	IPI0089497E IPI0089497E	yes	no		3 3.3119E-05	101.64
VIVPPAPPSCSIQGVYVGTN(de)VTINCK	2866.4721	IPI00126827 IPI00126827	yes	no	3,4	5.3763E-09	109.85
VIYIPAYN(de)CTIRPVSK	1893.0182	IPI00469387 IPI00469387	yes	no		3 0.0029863	99.531
VKN(de)STCIDDSWIHPK	1798.8672	IPI00122584 IPI00122584	yes	yes		3 6.5593E-08	153.81
VKPTPPYN(de)ISVTNSEEISSIHK	2415.2897	IPI0012015E IPI0012015E	yes	yes		3 3.2659E-22	159.95
VMSWWDYGYQIAGMAN(de)R	2046.908	IPI0031646E IPI0031646E	yes	yes	2,3	4.8519E-28	182.57
VMSWWDYGYQITAMAN(de)R	2090.9343	IPI0010910E IPI0010910E	yes	yes	2,3	4.4559E-22	177.84
VN(de)GTDIAPDIINGSQIIIR	2008.0953	IPI0013169E IPI0013169E	yes	no		3 3.0583E-06	131.25
VN(de)GTITQVIVGAPTHDDVSK	2163.1535	IPI0022571E IPI0022571E	yes	yes	2,3	1.7238E-48	192.62
VN(de)ISFPSAQSIASDTHIK	2011.0375	IPI0062466E IPI0062466E	yes	yes	2,3	3.7963E-94	237.3

VN(de)ITVIPSITSR	1298.7558	IPI00323857	IPI00323857	yes	no		2	0.0007722	114.24
VN(de)KTEEDYAR	1223.5782	IPI00133103	IPI00133103	yes	no	2,3		0.0006336	130.01
VN(de)KTEEDYARDSIFVR	1940.9592	IPI00133103	IPI00133103	yes	no		2	0.0024844	106.3
VN(de)SSIHSQISR	1226.6367	IPI0040001E	IPI0040001E	yes	no		2	0.0045714	96.604
VNCEERN(de)VTGIENFTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3		3.1557E-36	192.24
VNCEERNVTGIEN(de)FTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3		3.1557E-36	192.24
VNDNK(de)TAAEEAIR	1429.7161	IPI0040001E	IPI0040001E	yes	no		2	0.0014269	131.32
VNGTDIAPDIIN(de)GSQIIIR	2008.0953	IPI00131693	IPI00131693	yes	no		3	3.0583E-06	131.25
VNRFN(de)STEYQVVTR	1711.8642	IPI00119063	IPI00119063	yes	no	2,3		0.0003123	126.71
VNYEGGTWDWIAEAISSN(de)HTR	2405.1036	IPI0013458E	IPI0013458E	yes	yes		3	1.4842E-22	161.47
VPFIFNINPATTN(de)FTGSCQPQSAQIR	2907.4338	IPI00222967	IPI00222967	yes	no	3,4		8.892E-47	188.24
VPIHCTN(de)GSVVYHEVINAMQCR	2583.2145	IPI0079857E	IPI0079857E	yes	yes		3	0.0072084	67.644
VPMMVQSGN(de)ISYFR	1627.7851	IPI0011610E	IPI0011610E	yes	yes		3	3.7284E-05	136.3
VPNNAIEGIEN(de)ITAIYIHHNEIQEVGSSMR	3347.6568	IPI00120187	IPI00120187	yes	yes	3,4,5		3.817E-15	125.54
VPSN(de)STETVIESDQFQPGVR	2189.06	IPI0011929E	IPI0011929E	yes	no		3	1.452E-09	141.18
VPTREENIQVYN(de)VTK	1788.937	IPI0085069E	IPI0085069E	yes	yes		2	0.0055858	99.451
VQGGSSVWGSVITHN(de)SSAITYQSWGR	2763.3365	IPI00453977	IPI00453977	yes	no	3,4		1.9265E-13	126.45
VQPFN(de)VTK	931.51272	IPI00222967	IPI00222967	yes	no	1,2		0.018024	101.43
VQPIASSTIHSIDITSVYGTVMN(de)R	2687.3953	IPI0067425E	IPI0067425E	yes	yes	3,4		8.2671E-17	145.04
VQPMTASN(de)WTIVMEGEWMIK	2350.116	IPI0045382E	IPI0045382E	yes	no		3	3.2083E-14	150.91
VQSIQTIAAN(de)NSAIK	1627.8893	IPI00129304	IPI00129304	yes	yes	2,3		1.3044E-09	154.39
VREAN(de)ITEDQIIFFPK	1919.0153	IPI00122122	IPI00122122	yes	no	2,3,4		3.0911E-05	134.76
VRIDPPC(de)TNTTAPSNYINNPYVR	2661.2969	IPI0065853E	IPI0065853E	yes	no		3	2.7013E-16	148.06
VSESEKSIQVN(de)ETHWQYYGTSDDR	2843.2998	IPI0074965E	IPI0074965E	yes	no		3	1.3024E-13	135.98
VSGQMHHMN(de)ITFQTEASVAQKEK	2591.2108	IPI00312711	IPI00312711	yes	no		3	4.7566E-08	109.5
VSGQMHHMN(de)ITFQTEASVAQKEKFK	2995.4168	IPI00312711	IPI00312711	yes	no	3,4		0.005255	65.184
VSHVIN(de)DTHMK	1279.6343	IPI0067425E	IPI0067425E	yes	yes	2,3		0.0068452	91.961
VSIQEIPGSEHIEMIAN(de)ATTIAYIK	2727.4153	IPI0012442E	IPI0012442E	yes	yes	3,4		4.8931E-57	196.89
VSIQEIPGSEHIEMIAN(de)ATTIAYIKR	2883.5164	IPI0012442E	IPI0012442E	yes	yes		3	0.0025698	70.699
VSITN(de)VSISDEGR	1375.6943	IPI0085672E	IPI0085672E	yes	no		2	0.0004167	133.48
VSNYIGQAN(de)QSAWITVIPK	2088.1004	IPI0082868E	IPI0082868E	yes	no		3	3.2042E-05	118.48
VSQVIHEGGHN(de)VTK	1503.7794	IPI00463764	IPI00463764	yes	no	2,3,4		5.3145E-69	224.59
VSQVIHEGGHN(de)VTKIYESANIPDFRK	3050.5938	IPI00463764	IPI00463764	yes	no	3,4		1.9579E-05	97.5
VSSSEINF(de)DPVDKVKPTPPYNISVTNSEEISSIK	3832.9622	IPI0012015E	IPI0012015E	yes	yes		4	0.016783	45.325
VSTIYANN(de)GSVIQGSTVASVYHK	2394.2179	IPI00121114	IPI00121114	yes	yes	2,3,4		7.571E-223	291.78
VSTIYANN(de)GSVIQGSTVASVYHKR	2550.319	IPI00121114	IPI00121114	yes	yes	3,4		7.553E-05	97.271
VSTVTIVSATSTAN(de)MTMSPEGR	2340.1301	IPI0040660E	IPI0040660E	yes	yes	2,3,4		2.0485E-17E	276.68
VTGITTSTTEITWDPPVIAERNGHITN(de)YTVVYR	3703.8846	IPI00110264	IPI00110264	yes	yes	3,4		8.4426E-06	81.297
VTIDFN(de)ITDPENGPVIDDAIPNSVHGHIPFAK	3441.7205	IPI01026704	IPI01026704	yes	yes	3,4		4.119E-30	144.7
VTIDFN(de)ITNPENGPVIDDAIPNSVHGHIPFAK	3440.7365	IPI00466371	IPI00466371	yes	yes	4,5		9.2159E-09	98.491
VTIIPN(de)QTHYVVPK	1607.9035	IPI00742414	IPI00742414	yes	no		3	0.0031893	97.463
VTIN(de)ESEICAGAEK	1519.7188	IPI0011650E	IPI0011650E	yes	no		2	0.0018044	104.45
VTINNWWAN(de)K	1157.6193	IPI00136642	IPI00136642	yes	yes		2	0.020004	87.568
VTINNWWAN(de)KTEGR	1600.8322	IPI00136642	IPI00136642	yes	yes	2,3		4.5438E-24	188.12
VTIWWHPFVNYN(de)SSSFGEGER	2523.2183	IPI0046425E	IPI0046425E	yes	yes		3	1.4107E-05	100.92
VTNIMTQTAN(de)ATSIIGTMTDAFPK	2582.272	IPI00923031	IPI00923031	yes	no	3,4		1.2668E-08	110.67
VTNSNANAAGPIIVAGYN(de)VSGSVR	2330.1979	IPI0022242E	IPI0022242E	yes	yes		3	3.9332E-22	140.73
VTPGAIIGISN(de)ITHISIK	1833.0724	IPI0031874E	IPI0031874E	yes	no		3	0.014226	69.331
VTTCHIPQQN(de)ATIYK	1772.888	IPI00410951	IPI00410951	yes	no	2,3		0.0007379	110.98
VTVEGMEYVFYN(de)DTK	1793.8182	IPI00405742	IPI00405742	yes	no	2,3		4.7927E-12	136.48
VVAVSPAN(de)ISR	1111.635	IPI0022999E	IPI0022999E	yes	yes		2	0.0097898	87.363
VVAVSPAN(de)ISREER	1525.8213	IPI0022999E	IPI0022999E	yes	yes	2,3		0.0002186	131.69
VVDGEREN(de)VSMVDYAHNNYQAQSAVPIR	3160.4996	IPI0013474E	IPI0013474E	yes	yes		3	1.0408E-08	110.06
VVDKGN(de)GSKPTSPEEVK	1769.9159	IPI0033063E	IPI0033063E	yes	no		3	0.0015576	104.94
VVFISPAVPEEPEAYN(de)ITVIIR	2455.3363	IPI00405742	IPI00405742	yes	no	2,3,4		2.896E-49	197.1
VVIAGSN(de)MTICCMSPTK	1867.8664	IPI0011929E	IPI0011929E	yes	no	2,3		2.7073E-12	156.67
VVIGEN(de)ITSNCPEVIYEIKEETPVFYK	3169.5893	IPI0067425E	IPI0067425E	yes	yes		3	2.7011E-23	149.73
VVIHPN(de)HSVVDIGIHK	1739.0094	IPI0040914E	IPI0040914E	yes	yes	2,3,4		8.6636E-13E	266.45
VVIISGVEPRPPTPQVQFTIN(de)ASSEDHKR	3200.6942	IPI0012297E	IPI0012297E	yes	no	3,4,5		2.6823E-09	114.2
VVINFN(de)GTSQEIMAVSEHR	2130.0528	IPI0011118E	IPI0011118E	yes	yes		3	9.901E-33	180.62
VVMDIPEIWN(de)ETSAEVADIK	2421.1774	IPI0011903E	IPI0011903E	yes	no	2,3		4.5552E-49	197.09
VVMDIPEIWN(de)ETSAEVADIKK	2549.2723	IPI0011903E	IPI0011903E	yes	no	2,3,4		1.0683E-08	127.01
VVN(de)VSEIYGPCTK	1565.7759	IPI0062695E	IPI0062695E	yes	no		3	0.0027177	99.844
VVN(de)VSEIYGPCTKR	1721.8771	IPI0062695E	IPI0062695E	yes	no		3	0.026524	74.987
VVNCQEFAN(de)ASR	1664.7941	IPI0011833E	IPI0011833E	yes	yes		2	0.0013323	104.44
VVPEPNIVIN(de)FSATAIR	1839.0254	IPI0065418E	IPI0065418E	yes	no		3	0.0006208	99.344
VVRPDSEIGERPPEDN(de)QSFQYDHEAFIGK	3358.5854	IPI00137831	IPI00137831	yes	yes		4	1.4354E-13	121.38
VVSVDISFRPIN(de)ETFPVVYIETPK	2748.4738	IPI0062466E	IPI0062466E	yes	yes	2,3,4		1.1572E-12E	242.18
VVSVDISFRPIN(de)ETFPVVYIETPKR	2904.5749	IPI0062466E	IPI0062466E	yes	yes	3,4,5		5.535E-243	219.61
VWDTAAAIN(de)R	1115.5724	IPI0022656E	IPI0022656E	yes	no		2	0.010745	97.456
VWN(de)QTEQEPAAHYHISICFVR	2560.2533	IPI0012907E	IPI0012907E	yes	no		3	0.010724	66.068
VWPDGVIPFVIGGN(de)FTGSQR	2145.1007	IPI0012518E	IPI0012518E	yes	no	2,3		8.2354E-07	131.25
VWPDYPN(de)ITVDPSIGWDHQVEQYR	2913.3722	IPI0084869E	IPI0084869E	yes	yes		3	0.0003648	102.07
VWVCDRDN(de)DCVDGSDEPANCTQMTGCVDEFR	3706.4487	IPI0011906E	IPI0011906E	yes	yes	3,4		1.72E-58	180.26
VWVCDRDNDCVDGSDEPAN(de)CTQMTGCVDEFR	3706.4487	IPI0011906E	IPI0011906E	yes	yes	3,4		1.72E-58	180.26
VYEEVINV(de)TPNDGFAK	1793.8836	IPI0062489E	IPI0062489E	yes	no		2	0.0017502	92.264
VYGGIVN(de)QSEINEGTAFRR	2100.0276	IPI0041628E	IPI0041628E	yes	yes	2,3		1.1702E-42	197.84
VYGNIN(de)ETWSR	1579.7379	IPI0076260E	IPI0076260E	yes	no		2	0.0037803	95.631
VYIHPFHIIYHN(de)K	1679.8936	IPI0065406E	IPI0065406E	yes	yes	2,3,4		1.4134E-15	175.15
VYIN(de)DSVEISR	1293.6565	IPI0012676E	IPI0012676E	yes	yes		2	0.033214	72.089
VYIN(de)DSVEISRNEK	1778.8799	IPI0012676E	IPI0012676E	yes	yes		2	1.1128E-32	188.59
VYMKN(de)VTVVIR	1320.7588	IPI0046921E	IPI0046921E	yes	yes	2,3		1.1019E-05	147.74
VYQIDGNYPGSSHVVIDHETYIIN(de)ITQANAAGGTPSWK	4115.0025	IPI0013779E	IPI0013779E	yes	yes		4	3.344E-05	63.44
VYSIPGREN(de)YSSVDANGIQSQMISR	2770.3344	IPI0012710E	IPI0012710E	yes	yes		3	5.1565E-05	96.016
VYTYADTPNDFQISN(de)FSIPEEDTK	2793.2657	IPI00108811	IPI00108811	yes	yes	2,3,4		3.4655E-16	141.36
VYTYADTPNDFQISN(de)FSIPEEDTKIK	3034.4448	IPI00108811	IPI00108811	yes	yes	3,4		2.0866E-27	164.94

VYTYADTPNDFQISN(de)FSIPEEDTKIKIPIIHQAIAK	4048.0833	IPI00108811	IPI00108811	yes	yes		4	7.2636E-15	111.81
VYVYAVN(de)QTR	1211.6299	IPI00466371	IPI01026704	no	no		2	0.0021195	110.39
WAAVVVPIGKEQN(de)YTCHVHHK	2472.2485	IPI00850057	IPI00850057	yes	no		3	0.0065659	78.078
WASVVVPIGKEQN(de)YTCR	2006.0044	IPI0010999€	IPI0010999€	yes	no	2,3		3.2409E-11	154.51
WECKN(de)DTIFGIK	1509.7286	IPI0012618€	IPI0012618€	yes	yes		2	0.002764	111.79
WGEVDIIGN(de)CSQFYPR	2054.9156	IPI0032067€	IPI0032067€	yes	yes		2	2.5978E-08	142.78
WGHN(de)VTEFQQR	1400.6585	IPI0075438€	IPI0075438€	yes	yes		2	0.025162	75.819
WKPPSDPNGN(de)ITHYIVYWER	2471.2022	IPI0012835€	IPI0012835€	yes	no		3	0.0026183	89.846
WTDNTEYN(de)NTIPIRGEER	2207.0243	IPI0027643€	IPI0027643€	yes	yes	2,3		1.0575E-08	145.33
WTGHN(de)VTVVQR	1295.6735	IPI0011906€	IPI0011906€	yes	yes		2	0.0005031	121.68
YAFQEIIIGDISFIPTIN(de)FSK	2415.2726	IPI00122557	IPI00122557	yes	no	2,3		1.4196E-17	157.22
YAIICGN(de)RTDAGQCPEGYVCVK	2530.1403	IPI0034128€	IPI0034128€	yes	yes		3	7.4463E-08	123.63
YATENDISSIHN(de)STITCIVNQTTSTITGTSPEIMEK	3854.819	IPI0023031€	IPI0023031€	yes	no	3,4		1.9522E-15	111.97
YATENDISSIHNSTITCIVN(de)QTTSTITGTSPEIMEK	3854.819	IPI0023031€	IPI0023031€	yes	no	3,4		1.9522E-15	111.97
YAVYWN(de)SSNPR	1355.6258	IPI00114364	IPI00114364	yes	no		2	0.0045714	96.604
YDIIINENGIISN(de)VSEPARAR	2514.333	IPI0022993€	IPI0022993€	yes	yes		3	4.3323E-05	96.55
YDIPASINYIIN(de)K	1522.8031	IPI0012926€	IPI0012926€	yes	yes	2,3		0.0002331	138.99
YDKSEVDGAAAMIN(de)YTHIIMEAVPGHPAIYR	3431.6642	IPI0087485€	IPI0087485€	yes	no	3,4		2.0082E-08	103.25
YDN(de)HSSSVIAAVVFEHSFNHSQDPIPIAVK	3307.6262	IPI00153807	IPI00153807	yes	no		4	0.018136	49.618
YDNHSSSVIAAVVFEHSFN(de)HSQDPIPIAVK	3307.6262	IPI00153807	IPI00153807	yes	no		4	0.018136	49.618
YDVN(de)RSDSGGSIQIEEGYFVHHFAPENIPTMSK	3723.7264	IPI00312711	IPI00312711	yes	no		4	2.6831E-34	149.04
YEPFASMN(de)ESTPTGITDHAQGPENIEESPK	3782.7622	IPI0013360€	IPI0013360€	yes	yes		4	1.8049E-17	116.34
YEPFASMN(de)ESTPTGITDHAQGPENIEESPKR	3938.8633	IPI0013360€	IPI0013360€	yes	yes		4	1.3284E-05	68.93
YEQAKN(de)ISQDIEK	1564.7733	IPI0040001€	IPI0040001€	yes	no		2	0.033837	81.703
YEQIQN(de)ETR	1179.552	IPI0015405€	IPI0015405€	yes	no		2	0.0030228	118.4
YEVVDWN(de)QSTIDCVDPISIAANR	2652.2126	IPI0033103€	IPI0033103€	yes	no		3	4.8478E-17	154.6
YEVVDWNQSTIDCVDPISIAAN(de)R	2652.2126	IPI0033103€	IPI0033103€	yes	no		3	4.8478E-17	154.6
YFFIQSVSDSDGRN(de)FTSSPPGQTQFK	2852.3406	IPI0034468€	IPI0034468€	yes	yes	3,4		1.035E-34	170.14
YFTNRIDVSQN(de)VSSDTDQSCESTK	2780.2195	IPI0012076€	IPI0012076€	yes	no		3	6.3971E-13	132.01
YGHPN(de)GTQGNSTMWVFTSTEQK	2566.1547	IPI0013116€	IPI0013116€	yes	yes		3	3.1521E-08	115.42
YGHPNGTQGN(de)STMWVFTSTEQK	2566.1547	IPI0013116€	IPI0013116€	yes	yes		3	3.1521E-08	115.42
YGIVVIDECPGVGIVIPQSFGN(de)ESIR	2817.4371	IPI0030923€	IPI0030923€	yes	no	2,3		1.9442E-27	159.98
YGKN(de)DSITITQIK	1479.7933	IPI0012342€	IPI0012342€	yes	no	2,3		6.6153E-31	194.98
YGMQNSGNEAAWN(de)YTIEQYQK	2494.0859	IPI0013458€	IPI0013458€	yes	yes		3	2.3476E-59	202.6
YGN(de)MTQDQDHVMHIITR	1814.8556	IPI0011589€	IPI0011589€	yes	no	2,3		0.0027557	89.624
YGTAVHIYVN(de)ETIANR	1933.0058	IPI00719927	IPI00719927	yes	no	2,3		7.1617E-21	175.51
YGTAVHIYVNETIAN(de)R	1933.0058	IPI00719927	IPI00719927	yes	no	2,3		7.1617E-21	175.51
YGYEN(de)DTEIANIYDEMVAK	2236.9834	IPI0084869€	IPI0084869€	yes	yes		3	5.0786E-09	137.45
YHGFIN(de)TSYHR	1393.6527	IPI0015405€	IPI0015405€	yes	no	2,3		4.1151E-06	147.37
YHHYSSN(de)FSIPK	1478.6943	IPI0012948€	IPI0012948€	yes	no	2,3		0.0007928	122.7
YHYN(de)ASIIDGTIIDSTWNIGK	2380.1699	IPI0013048€	IPI0013048€	yes	yes		3	1.7039E-09	135.09
YHYN(de)GTFIDGTIFDSSHNR	2243.0032	IPI0013048€	IPI0013048€	yes	yes	2,3		8.7438E-26	174.78
YHYN(de)GTIIDGTAFDSSYSR	2192.9763	IPI0012249€	IPI0012249€	yes	no	2,3		2.358E-05	120.9
YHYN(de)GTIIDGTIFDSSYSR	2208.0124	IPI0013048€	IPI0013048€	yes	yes	2,3		2.6059E-25	168.05
YIEIGN(de)ETIIR	1319.7085	IPI00850057	IPI00850057	yes	no		2	0.0005716	114.24
YIIVAQIN(de)ISR	1288.7503	IPI00228567	IPI00228567	yes	yes		2	0.0006413	113.47
YIKNGN(de)ATIIR	1261.7143	IPI0098582€	IPI0010999€	no	no	2,3		1.1114E-05	151.79
YIMWGISSDIWGEKPN(de)TSYIIGK	2657.32	IPI00323624	IPI00323624	yes	no		3	0.016583	65.808
YIN(de)ETQQITQK	1364.6936	IPI0012322€	IPI0012322€	yes	yes		2	1.2131E-41	203.61
YIN(de)ETQQITQKIK	1605.8726	IPI0012322€	IPI0012322€	yes	yes		2	0.0009547	135.81
YIN(de)FSTSEKEK	1344.6561	IPI0013501€	IPI0013501€	yes	no		2	0.0029553	109.24
YIQPIAVQFTN(de)ITVDTEIR	2333.2631	IPI0012155€	IPI0012155€	yes	yes	2,3		4.4779E-11€	241.68
YIQVVYIHNNN(de)ISAVGQNDFCR	2623.2602	IPI0012319€	IPI0012319€	yes	yes	2,3,4		5.4057E-86	221.79
YIYIASN(de)HSNK	1308.6463	IPI0011817€	IPI0011817€	yes	no		2	0.0040377	98.156
YKGIN(de)ITEDTYKPR	1696.8784	IPI0011980€	IPI0011980€	yes	yes	2,3		9.5074E-23	182.02
YKGN(de)ASAFIIPDQGR	1748.921	IPI0012807€	IPI0012807€	yes	yes	2,3		3.7648E-05	134.24
YKGTAGNAIMDGASQIVGEN(de)R	2151.0379	IPI0027907€	IPI0027907€	yes	yes	2,3		4.3283E-48	193.22
YKVAEIIAN(de)TSENAGFCIPEGNCMDSGVINISICK	3970.8573	IPI00127447	IPI00127447	yes	yes	4,5,6		1.5077E-43	152.13
YKVAEIIANTSENAGFCIPEGNCMDSGVIN(de)ISICK	3970.8573	IPI00127447	IPI00127447	yes	yes	4,5,6		1.5077E-43	152.13
YKYETTISPTSN(de)ISSNSFICIENR	2823.3385	IPI0062583€	IPI0062583€	yes	no	2,3,4		4.7414E-94	227.4
YKYETTISPTSNISSNSFICIEN(de)R	2823.3385	IPI0062583€	IPI0062583€	yes	no	2,3,4		4.7414E-94	227.4
YMDQNSDQWQDGVGYIN(de)SSEGAVGR	2704.146	IPI0011423€	IPI0011423€	yes	no		3	1.4653E-16	143.31
YMGPIPEDNIDHYRN(de)STVMSR	2607.221	IPI0012581€	IPI0012581€	yes	no	2,3		6.1394E-05	96.544
YMN(de)YTSIITFHCK	1676.7691	IPI00308971	IPI00308971	yes	yes		3	0.0012301	107.97
YN(de)HTGQVVIYK	1320.6826	IPI00466371	IPI01026704	no	no	2,3		9.2469E-10	160.18
YPHKPEIN(de)STTHPGADIK	2004.0065	IPI0011420€	IPI0011420€	yes	yes	2,3		2.0802E-37	195.6
YPHKPEIN(de)STTHPGADIKENFCR	2710.2922	IPI0011420€	IPI0011420€	yes	yes		3	8.9811E-05	96.234
YPQDYQFYIQN(de)FTAIPINTVVPQR	3011.5181	IPI0011085€	IPI0011085€	yes	no	2,3,4		8.0962E-21	149.44
YPTPGEAPGVVGNFN(de)K	1645.81	IPI00112614	IPI00112614	yes	yes	2,3		0.0003888	118.37
YQEGDITIYVINIHN(de)VTK	2119.095	IPI0017009€	IPI0017009€	yes	no		3	0.0001347	108.77
YQEIIIEISSIN(de)KTQWK	2108.079	IPI0099093€	IPI0099093€	yes	no	2,3		2.3386E-74	228.46
YQFNTNVVFSND(de)GTIVDR	2087.9912	IPI0032137€	IPI0032137€	yes	no	2,3		9.9369E-49	206.64
YQFNTNVVFSND(de)GTIVDRYR	2407.1557	IPI0032137€	IPI0032137€	yes	no		3	0.0050712	82.877
YQHVGQVIIFQAPEAGGRWN(de)QTQK	2754.399	IPI0089497€	IPI0089497€	yes	no	3,4		3.4216E-64	148.85
YQMDN(de)VSSIVQIIGSHIEDVNADIIQTK	3129.5652	IPI00330594	IPI00330594	yes	yes	3,4		4.95E-33	157.9
YRAEFVAN(de)DTGFVDIPQKEK	2397.1601	IPI00128154	IPI00128154	yes	no	2,3		2.3632E-30	174.2
YSIYKDPAGWISINPIN(de)GTVDTTAVIDR	3078.5662	IPI0012374€	IPI0012374€	yes	yes		3	1.4414E-13	122.84
YSN(de)ESQDISVNGYNCTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3		1.5218E-56	195.7
YSNESQDISVNGYN(de)CTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3		1.5218E-56	195.7
YSQAAN(de)STKEIDDCEQANK	2170.9437	IPI0018735€	IPI0018735€	yes	yes	2,3		4.8212E-13	148.06
YSVITAEKPVGDISSPN(de)ETK	2247.1634	IPI00125497	IPI00125497	yes	yes		3	8.9712E-08	124.63
YSVQHMYFTYN(de)ISDTEHFPNAISK	2891.3225	IPI0046921€	IPI0046921€	yes	yes	2,3,4		6.2351E-35	168.3
YTGN(de)ASAFIIPDQGR	1721.8737	IPI0013563€	IPI0013563€	yes	no	2,3		1.0993E-57	214.81
YTGN(de)ASAIIPDQGR	1687.8893	IPI0013183€	IPI0013183€	yes	no	2,3		2.0817E-42	186.98
YTSFEYPKN(de)ISFACNPGFFINGTSSSK	3062.412	IPI0032246€	IPI0032246€	yes	no	2,3,4		6.9947E-39	177.91
YTSFEYPKNISFACNPGFFIN(de)GTSSSK	3062.412	IPI0032246€	IPI0032246€	yes	no	2,3,4		6.9947E-39	177.91



YVMIPVADQDKCVVHYEN(de)STVPEKK	2948.4412	IPI0040914E	IPI0040914E	yes	yes	3,4	2.4143E-45	187.47
YVVVSTPEKSQITISNIDVN(de)VDPGTYVCNATNAQGTR	4111.0168	IPI0040849E	IPI0040849E	yes	no		4 1.921E-15	112.57
YVYVADIIAHEIHVIEKQPNMN(de)ITQIK	3178.6849	IPI00310567	IPI00310567	yes	yes	3,4	6.4614E-19	142.23
YWGN(de)ITVVMGEHDFSEKDGDEQVR	2810.2606	IPI0030789C	IPI0030789C	yes	yes		3 0.002311	81.016
YYHGEISYIN(de)VTR	1613.7838	IPI00404551	IPI00404551	yes	no	2,3	3.9853E-23	187.44
YYHGEISYIN(de)VTRK	1741.8788	IPI00404551	IPI00404551	yes	no	2,4	8.7651E-32	192.39
YYN(de)QSAGGSHTIQWMAGCDVESDGR	2788.1606	IPI0098582E	IPI0098582E	yes	no	3,4	1.3188E-68	207.43
YYN(de)YTISINGK	1334.6507	IPI0022142E	IPI0022142E	yes	yes		2 0.0013515	111.52

N-terminal Ser/Thr ratio 257 13.90%

Conventional HC strategy 1

De-glycopeptides Sequence

De-glycopeptides Sequence	Mass	Proteins	Leading r:	Unique (C	Unique (P	Charges	PEP	Score
YYN(de)YTISINGK	1334.6507	IPI0022142E	IPI0022142E	yes	yes		2 6.9856E-15	184.03
YYN(de)QSKGGSHTFQR	1671.7754	IPI00850057	IPI00850057	yes	no		2 0.0029419	145
YYN(de)QSAGGSHTIQWMAGCDVESDGR	2788.1606	IPI0098582E	IPI0098582E	yes	no	2,3	7.9418E-56	207.43
YYHGEISYIN(de)VTRK	1741.8788	IPI00404551	IPI00404551	yes	no	2,3,4	0.0005892	148.41
YYHGEISYIN(de)VTR	1613.7838	IPI00404551	IPI00404551	yes	no	2,3	3.838E-09	160.84
YVYVADIIAHEIHVIEKQPNMN(de)ITQIK	3178.6849	IPI00310567	IPI00310567	yes	yes	3,4	3.3737E-147	245.66
YVQN(de)GTYTAK	1143.556	IPI0011579E	IPI0011579E	yes	yes		2 0.017716	99.283
YVMIPVADQDKCVVHYEN(de)STVPEKK	2948.4412	IPI0040914E	IPI0040914E	yes	yes		3 1.3197E-08	122.19
YTSFEYPKNISFA(de)CNPFFINGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no		3 1.92E-74	214.65
YTSFEYPKN(de)ISFACNPGFFINGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no		3 1.92E-74	214.65
YTGN(de)ASAIIPDQGR	1687.8893	IPI0013183C	IPI0013183C	yes	no	2,3	1.4462E-11C	241.68
YTGN(de)ASAIIPDQGR	1721.8737	IPI0013563E	IPI0013563E	yes	no	2,3	9.708E-48	209.89
YSVQHMYFTYN(de)ISDTEHFPNAISK	2891.3225	IPI0046921E	IPI0046921E	yes	yes	2,3,4	3.4254E-18	171.42
YSVIIAEKPVGDISSPN(de)ETK	2247.1634	IPI00125497	IPI00125497	yes	yes	2,3	9.5358E-21	181.54
YSQAAN(de)STKEIDDCEQANK	2170.9437	IPI0018735E	IPI0018735E	yes	yes	2,3	0.000327	140.89
YSNESQDISVNGYN(de)CTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3	1.7526E-68	213.05
YSN(de)ESQDISVNGYNCTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3	1.7526E-68	213.05
YRAEFVAN(de)DTGFVDIPQKEK	2397.1601	IPI00128154	IPI00128154	yes	no	2,3	6.2011E-21	183.05
YQMDN(de)VSSIVQIIGSHIEDVNADIIQTK	3129.5652	IPI00330594	IPI00330594	yes	yes	3,4	9.6091E-40	192.94
YQHVGQVIFQAPEAGGRWN(de)QTQK	2754.399	IPI0089497E	IPI0089497E	yes	no		3 1.7758E-08	132.14
YQFNTNVVFSN(de)GTIVDR	2087.9912	IPI0032137E	IPI0032137E	yes	no	2,3	2.5388E-19	184.32
YQFEVICPAPRPGAASN(de)ISFQAPFR	2822.3963	IPI0031115E	IPI0031115E	yes	yes		3 1.2311E-08	120.25
YQEIIIESSIN(de)KTQWK	2108.079	IPI0067579E	IPI0067579E	yes	no		2 2.2947E-47	209.25
YQEGDITIYVINIHN(de)VTK	2119.095	IPI0017009E	IPI0017009E	yes	no		2 0.0016833	101.49
YPQDYQFYIQN(de)FTAIPINTVPPQR	3011.5181	IPI0011085E	IPI0011085E	yes	no	2,3,4	9.3384E-10	136.14
YPNN(de)GSIVWGK	1233.6142	IPI0084869E	IPI0084869E	yes	yes		2 0.0087193	102.4
YPHNHHVNNNTIEGN(de)CSSK	2205.9974	IPI0022142E	IPI0022142E	yes	yes		3 0.025361	73.168
YPHNHHVNN(de)NTIEGNCSK	2205.9974	IPI0022142E	IPI0022142E	yes	yes		3 0.025361	73.168
YPHKPEIN(de)STTHPGADIKENFCR	2710.2922	IPI0011420E	IPI0011420E	yes	yes		3 0.013955	77.037
YPHKPEIN(de)STTHPGADIK	2004.0065	IPI0011420E	IPI0011420E	yes	yes	2,3	0.0090011	99.392
YPAEQQRPIPN(de)VSIPR	1906.0425	IPI00453524	IPI00453524	yes	yes	2,3	0.0006845	150.34
YN(de)YTEDPTIIR	1383.667	IPI00137311	IPI00137311	yes	yes		2 0.0015286	130.56
YN(de)HTGQVVIYK	1320.6826	IPI00466371	IPI01026704	no	no	2,3	1.4714E-09	169.52
YN(de)GSIGIWR	1064.5403	IPI0013329E	IPI0013329E	yes	no		2 0.031481	96.143
YMN(de)YTSIITFHCK	1676.7691	IPI00308971	IPI00308971	yes	yes		2 0.024118	84.468
YMGIPEDNIDHYRN(de)STVMRSR	2607.221	IPI0012581E	IPI0012581E	yes	no		3 0.01059	82.877
YMDQNSDQWQDGVGYIN(de)SSEGAVGR	2704.146	IPI0011423E	IPI0011423E	yes	no		3 2.8288E-05	95.996
YMAIAIN(de)R	950.50077	IPI00123814	IPI00123814	yes	yes		2 0.020618	129.4
YKYETTISPTSNISSNSFCIEN(de)R	2823.3385	IPI0062583E	IPI0062583E	yes	no	2,3	1.3246E-48	198.1
YKYETTISPTSN(de)ISSNSFCIENR	2823.3385	IPI0062583E	IPI0062583E	yes	no	2,3	1.3246E-48	198.1
YKGTAGNAIMDGASQIVGEN(de)R	2151.0379	IPI0027907E	IPI0027907E	yes	yes	2,3	3.5497E-06	153.36
YKGIN(de)ITEDTYKPR	1696.8784	IPI0011980E	IPI0011980E	yes	yes	2,3	7.3042E-36	200.19
YIYIASN(de)HSNK	1308.6463	IPI0011817E	IPI0011817E	yes	no		2 0.0069329	107.03
YIQVVYIHNNN(de)ISAVGQNDFCR	2623.2602	IPI0012319E	IPI0012319E	yes	yes	2,3	1.3508E-247	220.64
YIQPIAVQFTN(de)ITVDTEIR	2333.2631	IPI0012155C	IPI0012155C	yes	yes	2,3	1.911E-20	180.08
YIN(de)ETQQITQK	1364.6936	IPI0012322E	IPI0012322E	yes	yes		2 1.5475E-147	191.79
YIMWGISSDIWGEKPN(de)TSYIIGK	2657.32	IPI00323624	IPI00323624	yes	no		3 0.003814	85.636
YIKNGN(de)ATIIR	1261.7143	IPI0098582E	IPI0098582E	no	no		2 7.5902E-06	162.26
YIKNGN(de)ATIIR	1261.7143	IPI0098582E	IPI0098582E	no	no		2 7.5902E-06	162.26
YIINGSHAN(de)ETR	1373.6688	IPI0012996E	IPI0012996E	yes	yes		2 0.021839	89.43
YIIN(de)GSHANETR	1373.6688	IPI0012996E	IPI0012996E	yes	yes		2 0.021839	89.43
YIIDFSIFAYPIPN(de)VTK	2000.0659	IPI00330381	IPI00330381	yes	no		2 0.0008131	118.47
YIEIGN(de)ETIIR	1319.7085	IPI00850057	IPI00850057	yes	no		2 2.2153E-39	203.51
YHYN(de)GTIIDGTIFDSSYSR	2208.0124	IPI0013048E	IPI0013048E	yes	yes	2,3	4.8516E-62	216.3
YHYN(de)GTIIDGTAFDSSYSR	2192.9763	IPI0012249E	IPI0012249E	yes	no	2,3	0.0002248	139.11
YHYN(de)GTFIDGTIFDSSHNR	2243.0032	IPI0013048E	IPI0013048E	yes	yes	2,3	3.5324E-19	181.54
YHYN(de)CSIIDGTR	1497.6671	IPI0012249E	IPI0012249E	yes	no		2 0.020968	83.204
YHYN(de)ASIIDGTIIDSTWNIGK	2380.1699	IPI0013048E	IPI0013048E	yes	yes	2,3	5.3951E-51	204.47
YHVIHIN(de)TTK	1224.6615	IPI00131021	IPI00131021	yes	yes	2,3	0.002399	125.74
YHHYSSN(de)FSIPK	1478.6943	IPI0012948E	IPI0012948E	yes	no	2,3	3.097E-05	151.26
YHGFIN(de)TSYHR	1393.6527	IPI0015405E	IPI0015405E	yes	no	2,3	0.0015949	124.42
YHDYITSTSNG(de)SIEGIENR	2318.0451	IPI00130754	IPI00130754	yes	yes	2,3	2.0878E-05	119.62
YGTAIVHIYVNETIAN(de)R	1933.0058	IPI00719927	IPI00719927	yes	no		2 2.9382E-08	167.29
YGTAIVHIYV(de)ETIANR	1933.0058	IPI00719927	IPI00719927	yes	no		2 2.9382E-08	167.29
YGQEQGTAPFQVSN(de)HTGR	1975.9137	IPI0040939E	IPI0040939E	yes	yes		3 0.000863	106.6
YGN(de)MTQDQHMHIITR	1814.8556	IPI0011589E	IPI0011589E	yes	no	2,3	0.0026925	101.6
YGMQNSGNEAAWN(de)YTIEQYQK	2494.0859	IPI0013458E	IPI0013458E	yes	yes	2,3	3.1749E-13E	250.26
YGKN(de)DSITITQIK	1479.7933	IPI0012342E	IPI0012342E	yes	no	2,3	0.0081635	136.17
YGIVVIDECPGVGIVIPQSFGN(de)ESIR	2817.4371	IPI0030923C	IPI0030923C	yes	no		3 5.1452E-11	113.7
YGHPNGTQGN(de)STMWPVFTSTEQK	2566.1547	IPI0013116E	IPI0013116E	yes	yes		3 6.1351E-09	149.44
YGHPN(de)GTQGNSTMWPVFTSTEQK	2566.1547	IPI0013116E	IPI0013116E	yes	yes		3 6.1351E-09	149.44
YFTNRI(de)DVSQNVSSDTDQSCESTK	2780.2195	IPI0012076E	IPI0012076E	yes	no		3 1.7873E-08	144.57

YFFIQSVSDSDGRN(de)FTSSPPGQTQFK	2852.3406	IPI0034468E	IPI0034468E	yes	yes		3	2.6508E-55	207.07
YEVVDWNQSTIDCVDPISIAAN(de)R	2652.2126	IPI00331032	IPI00331032	yes	no	2,3		5.1565E-18	172.75
YEVVDWN(de)QSTIDCVDPISIAANR	2652.2126	IPI00331032	IPI00331032	yes	no	2,3		5.1565E-18	172.75
YEQIQN(de)ETR	1179.552	IPI0015405E	IPI0015405E	yes	no		2	0.0030725	147.62
YE(de)TEKNNGAGYFIEHIAFK	2230.0695	IPI0011188E	IPI0011188E	yes	no		3	2.1393E-12	173.51
YDVN(de)RSDSGGSIQIEEGYFVHHFAPENIPTMSK	3723.7264	IPI00312711	IPI00312711	yes	no	3,4		6.4432E-20	118.42
YDKSEVDGAAAMIN(de)YTHIIMEAVPGHPAIYR	3431.6642	IPI0087485E	IPI0087485E	yes	no	3,4		4.0797E-19	139.22
YDIPASINYIIN(de)K	1522.8031	IPI0012926E	IPI0012926E	yes	yes		2	1.0606E-09	166.62
YAVYWN(de)SSNPR	1355.6258	IPI00114364	IPI00114364	yes	no		2	0.0022899	122.42
YATENDISSIHNSTITCIVN(de)QTTSITGTSPEIMEK	3854.819	IPI0023031E	IPI0023031E	yes	no	3,4		7.6954E-15	103.14
YATENDISSIHN(de)STITCIVNQTTSITGTSPEIMEK	3854.819	IPI0023031E	IPI0023031E	yes	no	3,4		7.6954E-15	103.14
YAFQEIIIGDISFIPTIN(de)FSK	2415.2726	IPI00122557	IPI00122557	yes	no		3	1.0561E-05	139.11
WYDHSN(de)MTFDKWADQDGEDIVDTCGFIYTK	3656.55	IPI0012085E	IPI0012085E	yes	no		3	8.7916E-69	210.22
WVITAAHCIIYPPWDKN(de)FTENDIIVR	3170.6012	IPI0011420E	IPI0011420E	yes	yes		3	2.7756E-13	127.58
WVGN(de)WTYEIK	1294.6346	IPI0015314E	IPI0015314E	yes	yes		2	1.4763E-07	169.65
WVDGASINFHWSNGEPN(de)DSR	2374.0363	IPI00223352	IPI00223352	yes	yes	2,3		3.2013E-07	157.47
WVDGASIN(de)FSHWSNGEPNDSR	2374.0363	IPI00223352	IPI00223352	yes	yes	2,3		3.2013E-07	157.47
WTGHN(de)VTVVQR	1295.6735	IPI0011906E	IPI0011906E	yes	yes		2	1.7387E-06	160.52
WTDNTEYN(de)NTIPIRGEER	2207.0243	IPI0027643C	IPI0027643C	yes	yes	2,3		0.0006569	147.07
WTDNTEYN(de)NTIPIR	1735.8166	IPI0027643C	IPI0027643C	yes	yes		2	0.043072	67.102
WSN(de)DSATISFTKPSWQK	2038.9749	IPI0032006E	IPI0032006E	yes	no		2	2.5799E-07	161.91
WSFSN(de)GTSWQK	1326.5993	IPI0031557E	IPI0031557E	yes	yes		2	4.8508E-10	174.77
WQN(de)DTGSPDKSDISQK	1804.8228	IPI0022230E	IPI0022230E	yes	yes		2	8.3226E-75	224.59
WQIHN(de)ISGK	1081.5669	IPI0098726E	IPI0098726E	yes	no		2	0.01069	114.4
WKPPSPDNGN(de)ITHYIVYWER	2471.2022	IPI0012835E	IPI0012835E	yes	no		3	0.014471	87.24
WIQQEFHSN(de)ASIPTHIVTFNVIEK	2837.4501	IPI0062434E	IPI0062434E	yes	yes		3	8.3393E-09	144.27
WIN(de)ETQIK	1030.5447	IPI00453524	IPI00453524	yes	yes		2	0.0002413	149.82
WICDGDNDCGNSEDESN(de)ATCSAR	2631.9497	IPI0011906E	IPI0011906E	yes	yes	2,3		3.9508E-09	140.73
WGHN(de)VTEFQQR	1400.6585	IPI0075438E	IPI0075438E	yes	yes	2,3		1.3503E-06	162.38
WGEVDIIGN(de)CSQFYPRDYEK	2638.1798	IPI0032067E	IPI0032067E	yes	yes	2,3		1.9174E-05	133.86
WGEVDIIGN(de)CSQFYPR	2054.9156	IPI0032067E	IPI0032067E	yes	yes		2	4.9825E-36	196.71
WFHN(de)ESIIPHQDANYVIQSAR	2524.2248	IPI0016287C	IPI0016287C	yes	yes		3	2.9066E-06	126.8
WECKN(de)DTIFGIK	1509.7286	IPI0012618E	IPI0012618E	yes	yes	2,3		0.0047107	118.87
WASVVVPIGKEQN(de)YTCR	2006.0044	IPI0010999E	IPI0010999E	yes	no	2,3		0.0038219	109.83
WASVVVPIGKEQN(de)YTCHVYHEGIPEPITIR	3491.766	IPI01026927	IPI01026927	yes	no	3,4		2.9883E-05	89.979
WAAVVVPIGKEQN(de)YTCHVHHK	2472.2485	IPI00850057	IPI00850057	yes	no	2,3		1.4991E-05	131.25
VYVYAVN(de)QTR	1211.6299	IPI00466371	IPI01026704	no	no		2	3.9724E-12	178.08
VYTYADTPNDFQISN(de)FSIPEEDTKIKIPIIHQAIAK	4048.0833	IPI00108811	IPI00108811	yes	yes		3	0.0007131	77.322
VYTYADTPNDFQISN(de)FSIPEEDTKIK	3034.4448	IPI00108811	IPI00108811	yes	yes		3	1.5581E-29	179.58
VYTVSSSPSCYMYVYVN(de)TTEVAIEQDIAYIQEIK	3962.8846	IPI00136012	IPI00136012	yes	yes		4	0.0010248	64.726
VYSIPGREN(de)YSSVDANGIQSQMISR	2770.3344	IPI0012710C	IPI0012710C	yes	yes		3	6.4552E-18	168.84
VYQIDGNYPGSSHVIDHETYIIN(de)ITQANAAGGTPSWKR	4271.1036	IPI00137792	IPI00137792	yes	yes		4	0.024165	38.366
VYQIDGNYPGSSHVIDHETYIIN(de)ITQANAAGGTPSWK	4115.0025	IPI00137792	IPI00137792	yes	yes	3,4		0.0001974	72.163
VYN(de)GSVPFEER	1295.6146	IPI00265291	IPI00265291	yes	no		2	1.5991E-15	185.25
VYMKN(de)VTVVIR	1320.7588	IPI0046921E	IPI0046921E	yes	yes	2,3		6.1498E-06	162.36
VYIN(de)DSVEISR	1778.8799	IPI0012676E	IPI0012676E	yes	yes		2	1.5983E-25	188.12
VYIN(de)DSVEISR	1293.6565	IPI0012676E	IPI0012676E	yes	yes		2	1.6706E-14	179.35
VYIHPFHIIYHN(de)K	1679.8936	IPI0065406E	IPI0065406E	yes	yes	2,3		2.4614E-06	157.78
VYQGQININ(de)ETWSR	1579.7379	IPI0076260E	IPI0076260E	yes	no		2	4.2547E-19	183.89
VYGGIVN(de)QSEINEGTAFFR	2100.0276	IPI0041628E	IPI0041628E	yes	yes	2,3		1.2704E-93	229.96
VWVCDRDNDVDSDEPAN(de)CTQMTGCVDEFR	3706.4487	IPI0011906E	IPI0011906E	yes	yes		3	4.945E-05	87.991
VWPDGVIPFVIGGN(de)FTGSQR	2145.1007	IPI00125182	IPI00125182	yes	no	2,3		0.0016488	91.401
VWN(de)STFIEDYKDFDR	1933.8846	IPI00468674	IPI00468674	yes	no		2	3.1316E-07	162.46
VWN(de)QTEQEPAAHYHISICFVR	2560.2533	IPI0012907E	IPI0012907E	yes	no		3	0.0002006	100.35
VVTPEEYFN(de)VTIQ	1537.7664	IPI0013310E	IPI0013310E	yes	no		2	0.015048	88.075
VVSVDISFRPIN(de)ETFPVYIETPKR	2904.5749	IPI0062466E	IPI0062466E	yes	yes		3	2.0388E-101	232.49
VVSVDISFRPIN(de)ETFPVYIETPK	2748.4738	IPI0062466E	IPI0062466E	yes	yes	2,3,4		1.6566E-24	181.54
VVRPDEIGERPPEDN(de)QSFQYDHEAFIGK	3358.5854	IPI00137831	IPI00137831	yes	yes		3	0.0006865	82.517
VVN(de)VSEIYGTCTK	1565.7759	IPI0062695C	IPI0062695C	yes	no		2	0.0003631	125.67
VVN(de)STTGTGEHIR	1369.695	IPI0013122E	IPI0013122E	yes	no		2	0.029648	76.728
VVMDIPYEIWN(de)ETSAEVADIKK	2549.2723	IPI0011903E	IPI0011903E	yes	no	2,3,4		3.7511E-06	135.86
VVMDIPYEIWN(de)ETSAEVADIK	2421.1774	IPI0011903E	IPI0011903E	yes	no		2	2.3277E-51	208.98
VVIRPFYITN(de)STDMV	1753.9073	IPI0011980E	IPI0011980E	yes	no		2	0.022734	94.532
VVINFN(de)GTSQEIMAVSEHR	2130.0528	IPI0011118E	IPI0011118E	yes	yes	2,3		0.0003849	142.26
VVIISGVEPRPPTPQVQTIN(de)ASSEDHKR	3200.6942	IPI0012297E	IPI0012297E	yes	no		3	7.4901E-09	104.38
VVIHPN(de)HSVVDIGIHK	1739.0094	IPI0040914E	IPI0040914E	yes	yes	2,3,4		6.0887E-36	199.13
VVIAGSN(de)MTICCMSPTK	1867.8664	IPI0011929E	IPI0011929E	yes	no		2	1.8435E-18	178
VVFISPAVPEEPEAYN(de)ITVIIR	2455.3363	IPI00405742	IPI00405742	yes	no	2,3,4		3.2236E-06	113.49
VVDGEREN(de)VSMVDYAHNNYQAQSAVPIR	3160.4996	IPI0013474E	IPI0013474E	yes	yes		3	0.0004221	83.992
VVEGMEYVYFN(de)DTK	1793.8182	IPI00405742	IPI00405742	yes	no		2	2.6113E-08	166.9
VTTCHIPQQN(de)ATIYK	1772.888	IPI00410951	IPI00410951	yes	no		2	0.0052644	93.237
VTNSNANAAGPIIVAGYN(de)VSGSVR	2330.1979	IPI0022242E	IPI0022242E	yes	yes	2,3		3.1985E-69	216.67
VTITFATDESGN(de)HTGWK	1862.8799	IPI0046706E	IPI0046706E	yes	no		2	1.8667E-12	173.03
VTINNWWAN(de)KTEGR	1600.8322	IPI0013664E	IPI0013664E	yes	yes	2,3		1.556E-18	183.81
VTINNWWAN(de)K	1157.6193	IPI0013664E	IPI0013664E	yes	yes		2	0.0012886	155.06
VTIN(de)ESEICAGAEEK	1519.7188	IPI0011650E	IPI0011650E	yes	no		2	0.0012398	130.47
VTIIPN(de)QTHYVVPK	1607.9035	IPI00742414	IPI00742414	yes	no		2	0.011707	89.231
VTIDFN(de)ITNPENGPVIDDAIPNSVHGHIPFAK	3440.7365	IPI00466371	IPI00466371	yes	yes		3	1.08E-19	127.83
VTIDFN(de)ITDPENGPVIDDAIPNSVHGHIPFAK	3441.7205	IPI01026704	IPI01026704	yes	yes	3,4		1.2878E-37	180.9
VSTVTIVSATSTAN(de)MTMSPEGR	2340.1301	IPI0040660E	IPI0040660E	yes	yes		2	5.697E-188	266.53
VSTIYANN(de)GSVIQGSTVASVYHKK	2550.319	IPI00121114	IPI00121114	yes	yes	2,3		1.3688E-05	101.33
VSTIYANN(de)GSVIQGSTVASVYHK	2394.2179	IPI00121114	IPI00121114	yes	yes	2,3		2.2612E-55	208.92
VSQVIHEGGHN(de)VTKIYESANIPDFRK	3050.5938	IPI00463764	IPI00463764	yes	no	3,4		3.3907E-38	186.62
VSQVIHEGGHN(de)VTKIYESANIPDFR	2922.4988	IPI00463764	IPI00463764	yes	no		3	1.2222E-17	163.91
VSQVIHEGGHN(de)VTK	1503.7794	IPI00463764	IPI00463764	yes	no	2,3		2.7794E-05	147.56
VSNYIGQAN(de)QSAWITVIPK	2088.1004	IPI0082868E	IPI0082868E	yes	no		2	1.6571E-06	159.8



VSNNGN(de)GSIEIPATVPGYVHSAIHQHGIQDPYYR	3688.8386	IPI00118011	IPI00118011	yes	no	3,4	0.0009971	69.578
VSITN(de)VSISDEGR	1375.6943	IPI00856723	IPI00856723	yes	no		2 4.2165E-122	249.33
VSIQEIPGSEHIEMIAN(de)ATTIAYIKR	2883.5164	IPI0012442E	IPI0012442E	yes	yes		3 0.01021	59.212
VSIQEIPGSEHIEMIAN(de)ATTIAYIK	2727.4153	IPI0012442E	IPI0012442E	yes	yes	2,3,4	9.282E-10	149.33
VSGQMHHMQN(de)ITFQTEASVAQKEK	2591.2108	IPI00312711	IPI00312711	yes	no		3 8.0759E-06	103.4
VSFYFFVTSPQN(de)VSDVIPR	2201.1157	IPI00153202	IPI00153202	yes	no		3 0.012565	76.85
VSESEKSQIVN(de)ETHWQYYGTS DTR	2843.2998	IPI0074965E	IPI0074965E	yes	no		3 1.9561E-09	152.13
VRIDPPC(de)TNTTAPS NYINNPYVR	2661.2969	IPI0065853E	IPI0065853E	yes	no		3 1.5521E-07	113.49
VQP IVAVADEGWYIQN(de)K	2042.0837	IPI00111163	IPI00111163	yes	no	2,3	4.9492E-62	218.12
VQGGSSVWGSVITHN(de)SSAIT YQSWGR	2763.3365	IPI00453977	IPI00453977	yes	no	2,3,4	1.1284E-13	124.51
VPTREENIQVYN(de)VTK	1788.937	IPI0085069E	IPI0085069E	yes	yes		2 0.014341	100.41
VPNNAIEGIEN(de)ITAIYIHHNEIQEVGSSMR	3347.6568	IPI00120187	IPI00120187	yes	yes	3,4	0.0010378	69.981
VNYEGGTWDWIAEAISSN(de)HTR	2405.1036	IPI0013458E	IPI0013458E	yes	yes		3 0.0091428	74.793
VNRFN(de)STEYQVVTR	1711.8642	IPI0011906E	IPI0011906E	yes	no	2,3	9.2685E-47	203.11
VNNVTGN(de)FTFVIR	1479.7834	IPI0039520E	IPI0039520E	yes	no		2 0.0008865	126.63
VNN(de)VTGNFTFVIR	1479.7834	IPI0039520E	IPI0039520E	yes	no		2 0.0008865	126.63
VNDSVPFHIGWN(de)STER	1856.8806	IPI0046425E	IPI0046425E	yes	yes	2,3	0.0065508	94.09
VNCEERNVTGIEN(de)FTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3	1.2896E-17	178.51
VNCEERN(de)VTGIENFTIK	2021.984	IPI00378224	IPI00378224	yes	yes	2,3	1.2896E-17	178.51
VNASTTDPN(de)STVEQSAITR	1989.9603	IPI0033878E	IPI0033878E	yes	no		2 0.0003327	139.11
VN(de)SSIHQSISR	1226.6367	IPI0102780E	IPI0102780E	yes	no		2 2.067E-51	215.72
VN(de)KTEEDYARDSIFVR	1940.9592	IPI0013310E	IPI0013310E	yes	no		2 0.0056513	117.08
VN(de)KTEEDYAR	1223.5782	IPI0013310E	IPI0013310E	yes	no		2 4.6696E-27	201.46
VN(de)ITYNYPVR	1237.6455	IPI0022185E	IPI0022185E	yes	yes		2 0.0016432	143.24
VN(de)ISFPSAQSIPASDTHIK	2011.0375	IPI0062466E	IPI0062466E	yes	yes	2,3	9.231E-06	157.47
VN(de)ISAPIPKEDPIFTYISK	2244.2406	IPI0076177E	IPI0076177E	yes	no		3 0.0099072	87.088
VN(de)GTKEPIEFK	1260.6714	IPI0034511E	IPI0034511E	yes	no		2 7.5722E-39	204.17
VN(de)GTITQVIIVGAPTHDDVSK	2163.1535	IPI0022571E	IPI0022571E	yes	yes		2 5.0835E-06	109.85
VN(de)FTIEASEGCYR	1544.6929	IPI0034215E	IPI0034215E	yes	no		2 2.9345E-09	162.72
VN(de)DSVPFHIGWNSTER	1856.8806	IPI0046425E	IPI0046425E	yes	yes	2,3	0.0065508	94.09
VN(de)ASTTDPNSTVEQSAITR	1989.9603	IPI0033878E	IPI0033878E	yes	no		2 0.0003327	139.11
VMSWWDYGYQITAMAN(de)R	2090.9343	IPI0010910E	IPI0010910E	yes	yes	2,3	3.8646E-19	184.22
VMSWWDYGYQIAGMAN(de)R	2046.908	IPI0031646E	IPI0031646E	yes	yes	2,3	4.3635E-05	151.8
VMEIEKEIAN(de)ATTKPEDR	2073.0412	IPI00461861	IPI00461861	yes	yes		3 0.0027194	118.55
VME(de)VNFIYVVMSTAAIPMIKQSNNGSIAVISSIAGK	3754.9712	IPI0011559E	IPI0011559E	yes	no	3,4	0.001093	64.152
VKPTPPYN(de)ISVTNSEEISSIK	2415.2897	IPI0012015E	IPI0012015E	yes	yes		3 5.5961E-06	125.23
VKN(de)STCIDDSWIHPK	1798.8672	IPI00122584	IPI00122584	yes	yes		2 0.024205	91.076
VIYIPAYN(de)CTIRPVSK	1893.0182	IPI00469387	IPI00469387	yes	no		2 0.030221	87.148
VIVIITDGEASDKGN(de)ISAAHDITR	2494.3027	IPI0089497E	IPI0089497E	yes	no		3 0.024149	66.325
VITNQESPYQN(de)HTGR	1742.8336	IPI0012531C	IPI0012531C	yes	no	2,3	1.7109E-75	225.85
VITMANQVITVN(de)ISEEGR	1973.0252	IPI0098726E	IPI0098726E	yes	yes		2 2.2856E-93	231.86
VISNN(de)CTSYGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes		2 0.0010264	139.29
VISN(de)NCTSYGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes		2 0.0010264	139.29
VISIAQAHSIN(de)FSCEQVR	2058.0317	IPI0030899C	IPI0030899C	yes	yes	2,3	8.0248E-08	160.8
VIPFN(de)VTDYQCIVR	1722.8763	IPI0082822E	IPI0082822E	yes	no		2 0.0039424	105.46
VIPEPIHAPNVIDTGHNFAIIN(de)ISSEPYFGDGPBK	3770.9308	IPI00221547	IPI00221547	yes	no	3,4	0.0007636	66.378
VINN(de)ITNDIR	1170.6357	IPI0012817E	IPI0012817E	yes	no		2 7.6867E-94	237.84
VINEECKEN(de)ESINIAAR	1987.9633	IPI00122411	IPI00122411	yes	yes	2,3	0.008208	105.28
VINDTWAWKN(de)ATIAEQAK	2058.0534	IPI0012334E	IPI0012334E	yes	yes	2,3	1.3733E-26	192.6
VINADQGSATVQMIIN(de)DTCPIFVR	2762.3731	IPI0032006E	IPI0032006E	yes	yes	2,3	3.2994E-09	121.62
VIN(de)STGH DVAR	1167.5996	IPI0084914E	IPI0084914E	yes	no		2 0.0005585	144.1
VIN(de)ITDNTYFK	1326.682	IPI00130117	IPI00130117	yes	yes		2 2.1882E-39	203.61
VIN(de)ISHSIIDISSEQIFDGIPAIQHINIQGNHFPK	3894.0428	IPI0034356E	IPI0034356E	yes	yes		4 0.0017001	54.732
VIN(de)DTWAWKNATIAEQAK	2058.0534	IPI0012334E	IPI0012334E	yes	yes	2,3	1.3733E-26	192.6
VIN(de)DTWAWK	1131.5713	IPI0012334E	IPI0012334E	yes	yes		2 0.014156	118.71
VIIIRPYITPNNQGIYIFQGN(de)STVR	2762.4868	IPI0031950E	IPI0031950E	yes	yes	2,3,4	1.3985E-32	188.24
VIIQSQPIGTIKHN(de)MTYFCK	2490.3127	IPI0010800E	IPI0010800E	yes	no		3 0.0002235	106.93
VIINFFVGTDDKN(de)STQHIIHFDQPR	2940.4882	IPI00461861	IPI00461861	yes	no		3 2.6536E-07	109.05
VIIN(de)ITTVAANHG YTK	1713.9414	IPI0046760C	IPI0046760C	yes	no		2 1.1759E-35	195.6
VIIIDPAISGN(de)ETEPYPAFTR	2415.2686	IPI0084869E	IPI0084869E	yes	yes	2,3	2.8227E-65	217.17
VIHIQFNSISSITDDTFCKAN(de)DTR	2781.3392	IPI0012084E	IPI0012084E	yes	yes		3 1.5724E-08	128.41
VIFYKDDAMVYN(de)VTSR	1919.9451	IPI00406901	IPI00406901	yes	no	2,3	6.2346E-08	167.89
VIETIPANYSIN(de)SSKK	1762.9465	IPI0048053E	IPI0048053E	yes	no		2 0.017676	82.102
VIETIPAN(de)YSINSSKK	1762.9465	IPI0048053E	IPI0048053E	yes	no		2 0.017676	82.102
VIENEKFDTHEYHN(de)ESR	2145.9716	IPI0046349E	IPI0046349E	yes	yes	2,3	8.6859E-92	232.15
VIEHYN(de)YTKETIDMQETT SR	2457.1482	IPI0012862E	IPI0012862E	yes	yes		3 0.0001258	140.89
VIEEPKN(de)VSCETR	1559.7614	IPI00118291	IPI00118291	yes	no		2 0.010531	110.51
VIDIW DIAQSAN(de)FTEKEIESFREEIK	3109.5608	IPI00469307	IPI00469307	yes	no		3 0.0007302	84.946
VIDIW DIAQSAN(de)FTEK	1848.9258	IPI00469307	IPI00469307	yes	no	2,3	3.0135E-08	166.77
VIAQHQNIIIFAN(de)SSSSMR	2002.0054	IPI0031904C	IPI0031904C	yes	no	2,3	0.0031435	99.044
VHSHGNN(de)YTIICQVK	1768.8679	IPI00118291	IPI00118291	yes	no		2 0.0012576	118.52
VHSGN(de)FSTIPQYFK	1623.8045	IPI01023131	IPI01023131	yes	no		2 0.0010139	119.96
VHITVCN(de)ITSR	1298.6765	IPI0012886E	IPI0012886E	yes	no		2 0.008318	103.44
VHGPN(de)ASHYTSIMTMITWER	2330.0936	IPI00169617	IPI00169617	yes	yes		3 4.8298E-05	107.57
VGYSQSN(de)ISCFFR	1604.7406	IPI0046425E	IPI0046425E	yes	yes		2 3.5326E-09	161.48
VGVNKN(de)QTVTATFGYPFR	1998.0323	IPI0011425E	IPI0011425E	yes	no	2,3	7.4296E-62	219.23
VGDEYQEIQIDGFDN(de)ESSNKTWMK	2832.2549	IPI00114671	IPI00114671	yes	no		3 1.5283E-07	111.49
VGCSEYTN(de)R	1084.4608	IPI0037764E	IPI0037764E	yes	yes		2 0.0084774	125.97
VGATAAVYSAAIIEYITAEVIEIAGN(de)ASK	2894.5277	IPI0055505E	IPI0055505E	yes	no	2,3	2.4986E-85	165.62
VFVYTPPTN(de)YTIR	1573.814	IPI0012442E	IPI0012442E	yes	yes		2 1.186E-85	228.78
VFPYISVMVNN(de)GSISYDHSKDGR	2584.238	IPI00321634	IPI00321634	yes	yes	2,3	4.6757E-08	142.88
VFPYISVMVNN(de)GSISYDHSK	2256.0885	IPI00321634	IPI00321634	yes	yes	2,3	9.2159E-10	166.47
VFPYISAMVNN(de)GSISYDHER	2298.0739	IPI0083035E	IPI0083035E	yes	no		2 1.1099E-05	132.59
VFNGKDN(de)ISK	1120.5877	IPI00331214	IPI00331214	yes	yes		2 0.000242	165.63
VFKTN(de)STQVSDVR	1479.7682	IPI0046942E	IPI0046942E	yes	no		2 0.018424	104.55
VFKPQSGADAIN(de)DSQDFPFPEPAK	2705.2973	IPI0046246E	IPI0046246E	yes	no		3 1.4202E-05	101.75

VFIVPVGN(de)HSNIPFSR	1781.9577	IPI0022141E	IPI0022141E	yes	no	2,3	0.0013747	115.82
VFHIHN(de)ESWVIITPK	1818.9781	IPI00224752	IPI00224752	yes	yes		2 1.1708E-91	229.97
VFGSQN(de)ITTVK	1192.6452	IPI00123342	IPI00123342	yes	yes		2 5.6639E-40	209.19
VFDIHNMGSVN(de)VSVGCTPAQIETSR	2958.4328	IPI00116913	IPI00116913	yes	no		3 0.0006604	79.36
VETGVKPGMVVTFAPVN(de)VTTEVK	2514.3767	IPI00307837	IPI00307837	yes	yes	2,3	3.3233E-05	103.02
VDVIVAN(de)ITVTDKQDQPTPAWNAAYR	2893.4723	IPI00323134	IPI00323134	yes	no		3 1.2734E-23	176.67
VDIPQQPMGIIAVAN(de)DTNSCEISPCR	2884.3517	IPI00119063	IPI00119063	yes	yes		3 6.8677E-11	113.31
VDIEDFEN(de)NTAYAK	1627.7366	IPI0055116E	IPI0055116E	yes	no		2 4.3461E-25	296.22
VDFIWHPEVN(de)GSMK	1657.7923	IPI0038029E	IPI0038029E	yes	yes		2 0.0004504	125.61
VDDEMPQHAVISGPNIFINNINKTDN(de)GTYR	3371.6205	IPI00856723	IPI00856723	yes	no	3,4	3.9371E-19	148.89
VDDEMPQHAVISGPNIFINNIN(de)KTDNGTYR	3371.6205	IPI00856723	IPI00856723	yes	no	3,4	3.9371E-19	148.89
VAGIIVIN(de)YSNDYNHWIATK	2290.1746	IPI0011190E	IPI0011190E	yes	no	2,3	3.1173E-38	195.77
VAEVENGTKPDSVPEHCIDTWSFDAATMDHN(de)GTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes		4 0.0003625	69.7
VAEVEN(de)GTKPDSVPEHCIDTWSFDAATMDHNGTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes		4 0.0003625	69.7
TV(de)VTEAGNIKDQATQEEIHYIEK	2827.4604	IPI0092832C	IPI0092832C	yes	no		3 6.8221E-10	153.65
TTIVDNNTWN(de)NSHIAIVGK	2096.0651	IPI0031646E	IPI0031646E	yes	yes		2 4.2201E-08	160.45
TQITCSIN(de)SSGVDIVGHR	1942.9531	IPI0040849E	IPI0040849E	yes	no	2,3	0.0015096	102.57
TITIIN(de)VTR	1029.6182	IPI0010853E	IPI0010853E	yes	no		2 2.248E-11	177.78
TIIVDNNTWN(de)NTHISR	1896.9442	IPI0010910E	IPI0010910E	yes	yes		2 9.5323E-92	228.9
TIIVDN(de)NTWNNTHISR	1896.9442	IPI0010910E	IPI0010910E	yes	yes		2 9.5323E-92	228.9
TIIGYYN(de)QSAGGHTTIQWMYGCDVGS DGR	3206.4186	IPI0010999E	IPI0010999E	yes	yes		3 2.7361E-07	94.73
TIGISPFHEFADVFTAN(de)DSGHR	2516.2084	IPI0012756C	IPI0012756C	yes	yes		3 0.0001185	93.269
TGRVYN(de)VTQHAMIIVNKQVK	2355.2845	IPI0046819E	IPI0046819E	yes	no		3 0.0026446	97.095
TEIDIRPQGIAIFSN(de)VSEAR	2215.1597	IPI00122973	IPI00122973	yes	no		3 0.0009651	101.67
TAASIIWQAYPIIN(de)ISEK	2017.0884	IPI00115867	IPI00115867	yes	yes		3 0.0003959	147.07
STIIHHPQYAWIQDIGIREDNEGVYNG(de)SWGGR	3780.8397	IPI00230084	IPI00230084	yes	no		4 0.0095609	65.275
SN(de)VTRPSEFNWIPIPIFIK	2491.3264	IPI0031950E	IPI0031950E	yes	no		3 0.030479	75.97
SIKQININ(de)ISAPIMSR	1670.9138	IPI00123881	IPI00123881	yes	no		3 0.016471	97.551
SIIDHIHVGVRDN(de)VSQPK	2070.097	IPI0012342E	IPI0012342E	yes	no		2 0.0003152	126
RYIKNG(de)NATIIR	1417.8154	IPI0098582E	IPI0098582E	yes	no	2,3	0.019075	111.52
RYIK(de)NGNATIIR	1417.8154	IPI0098582E	IPI0098582E	yes	no	2,3	0.019075	111.52
RYIEIG(de)NETIIR	1475.8096	IPI00850057	IPI00850057	yes	no	2,3	4.2192E-52	212.9
RVNDN(de)KTAAEEAIR	1585.8172	IPI0102780E	IPI0102780E	yes	no		2 1.6943E-05	158.52
RVM(de)EVNFISYVVMSTAAIPMIKQSNISIAVISSIAGK	3911.0723	IPI0011559E	IPI0011559E	yes	no		4 0.0003825	63.412
RVYIPAY(de)NCTIRPVSK	2049.1194	IPI00469387	IPI00469387	yes	no	2,3	2.4355E-07	164.53
RSPGAQDN(de)VSVSQGM	1687.806	IPI0034858E	IPI0034858E	yes	no		3 0.0022957	117.08
RSN(de)FTPATNEAPQATVFPK	2075.0436	IPI0017203E	IPI0017203E	yes	no		3 0.0003489	119.46
RQDPVSWN(de)KTFEDISR	1976.9704	IPI0084869E	IPI0084869E	yes	yes		3 0.007841	110.04
RPFVVYEMEVDTIETTCHADPTPIAN(de)CSVR	3676.7324	IPI0012824E	IPI0012824E	yes	yes	3,4	1.7446E-08	96.505
RNPSANTFIHIN(de)ASSFR	1930.9762	IPI0031553E	IPI0031553E	yes	yes	2,3	0.0003803	143.67
RN(de)WTINRINGDFAQINIK	2172.1552	IPI00323134	IPI00323134	yes	no		3 0.0034071	140.74
RN(de)WTEVEVR	1189.584	IPI0013439C	IPI0013439C	yes	yes		2 0.015127	123.63
RN(de)FTAADWGHRSR	1416.6647	IPI0033988E	IPI0033988E	yes	no	2,3	0.0070091	106.58
RMHIN(de)GSNVQVIHR	1659.874	IPI00119063	IPI00119063	yes	yes	2,3	4.0391E-47	203.87
RIYAGMVSIMDEAVGN(de)VTK	2053.0336	IPI0065235E	IPI0065235E	yes	no		2 0.044985	50.883
RIPVTN(de)ISQIHK	1404.8201	IPI0046942E	IPI0046942E	yes	no		3 0.013595	97.463
RIGAI(de)NNSIIIEDR	1695.9632	IPI0011551E	IPI0011551E	yes	no	2,3	0.0010219	140.27
RIAVDWESIGYN(de)ITR	1791.9268	IPI0012304C	IPI0012304C	yes	no		3 0.0009567	130.2
RHEEGHMIN(de)CTCFGQGR	2087.8836	IPI0011353E	IPI0011353E	yes	no	2,3	0.0010876	121.13
RGVFITN(de)ETGQPIIGK	1728.9523	IPI0011196C	IPI0011196C	yes	no	2,3	5.9231E-60	212.11
RGTFTDCAIAN(de)MTQQR	1981.9462	IPI00621027	IPI00621027	yes	no		3 0.0013412	140.96
RGPECSQN(de)YTAPTGVK	1876.9101	IPI0012399E	IPI0012399E	yes	yes	2,3	6.4961E-05	153.94
RGDDIYTN(de)VTVSIVEAIVGFEMDITHIDGHK	3443.7031	IPI00320241	IPI00320241	yes	yes		4 3.1265E-19	118.85
RGCKDN(de)ATDSVPIR	1587.7787	IPI00119063	IPI00119063	yes	yes		2 0.0093796	135.02
RFHSDIN(de)ISESIIPAVIEK	2167.1637	IPI00831484	IPI00831484	yes	yes	2,3	0.0004037	116.96
RFANEYPN(de)ITR	1379.6946	IPI00130573	IPI00130573	yes	yes		2 0.020613	93.011
RDQGN(de)VTDMASMK	1451.6497	IPI00471081	IPI00471081	yes	yes		3 0.0015438	129.37
RDDYRPTWTI(de)NQTEPVAGNYYPVNTR	3125.4955	IPI00381303	IPI00381303	yes	yes		3 1.5893E-12	134.81
RDDIHTIPAGQYFIN(de)ITYNYPVHSFDGR	3405.6531	IPI0038731E	IPI0038731E	yes	no	3,4	5.8108E-76	214.16
ratio	1.04%							
RAN(de)ASTFAVPSPVNSADTR	2047.0083	IPI0011906E	IPI0011906E	yes	yes		3 0.0031248	89.344
RADIN(de)GSNMETVIGHGK	1910.9632	IPI0041114E	IPI0041114E	yes	no		3 0.02227	79.837
QVVEN(de)MTR	975.48076	IPI0011196C	IPI0011196C	yes	no		2 0.029357	121.09
QVTPIFFYFQN(de)R	1558.7932	IPI0031950E	IPI0031950E	yes	no	2,3	0.0070583	136.48
QVN(de)GSVSGSQWNK	1389.6637	IPI0040885C	IPI0040885C	yes	yes		2 0.026662	79.089
QVEIIEYPYHEQIIVVAPEIITGHN(de)YTIK	3463.8028	IPI00223987	IPI00223987	yes	yes	3,4	1.6843E-19	121.58
QVEIIVN(de)HTGIR	1506.8154	IPI00263041	IPI00263041	yes	yes		2 0.019808	84.468
QVAIQTFGN(de)QTSIIPAGGAGYK	2220.1539	IPI0022871E	IPI0022871E	yes	yes	2,3	0	312.9
QTTAMDFSAN(de)ETVCWVHVGDSAAQTQIK	3257.4758	IPI00119063	IPI00119063	yes	no	3,4	0.0056716	56.298
QTQVGIVQYGAN(de)VTHEFNINK	2359.1921	IPI00466371	IPI01026704	no	no	2,3	7.5699E-10	162.09
QSQPVHIIPMNETDHINMVFSN(de)K	2678.2945	IPI0013350C	IPI0013350C	yes	yes		3 0.0062407	73.783
QSQPVHIIPMN(de)ETDHINMVFSNK	2678.2945	IPI0013350C	IPI0013350C	yes	yes		3 0.0062407	73.783
QSN(de)GSIAVISSIAGK	1430.7729	IPI0011559E	IPI0011559E	yes	no		2 7.1086E-56	207.79
QRYN(de)ITAK	992.54033	IPI00130661	IPI00130661	yes	yes		2 8.8701E-07	189.7
QQGGQVTIIVQEAYKQYN(de)ATINR	2734.4402	IPI00757554	IPI00757554	yes	yes		2 0.0044561	76.817
QQCIEEAQIEN(de)ETTGCSK	2123.9099	IPI00128984	IPI00128984	yes	yes		2 1.11E-18	179.1
QPIYIN(de)CSCVTGGSASAK	1911.8819	IPI0030924E	IPI0030924E	yes	yes		2 0.000511	118.48
QNFSN(de)ITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2 0	308
QN(de)FSNITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2 0	308
QMWKSPN(de)GTIRNIIGGTVFR	2274.2055	IPI00135231	IPI00135231	yes	no		3 0.029852	71.263
QMAIN(de)ATYIFNGITVSIPIGMEK	2397.2072	IPI0031635E	IPI0031635E	yes	no		3 0.015757	59.585
QKNVNISYI(de)VNSDFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	2,3	1.0333E-05	158.58
QKN(de)VNISYIVNSDFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	2,3	1.0333E-05	158.58
QIN(de)ITTEDDDIYHMTVPYGRPR	2633.2544	IPI00265291	IPI00265291	yes	yes		3 1.9708E-05	117.2
QIN(de)ISIIVK	1026.6437	IPI0011511E	IPI0011511E	yes	yes		2 0.019594	113.62
QIMN(de)TSFNPIRIVNTYGAFGSVTK	2657.3636	IPI00405437	IPI00405437	yes	no		3 0.017877	65.855

QIITEEKIPN(de)NTQWITWSPEGHK	2748.3871	IPI00125813	IPI00125813	yes	no	2,3	6.4227E-42	199.99
QIIQTQVASPAIHPPVSYN(de)DTAPR	2602.3503	IPI00128989	IPI00128989	yes	no		3 0.0082142	64.203
QIINAIQIN(de)NTAVGHAIVIPARR	2481.4292	IPI00830749	IPI00830749	yes	yes		3 8.0196E-08	111.33
QIINAIQIN(de)NTAVGHAIVIPAR	2325.3281	IPI00830749	IPI00830749	yes	yes		3 0.0001565	99.021
QIIAN(de)SSAIEETIIGHQGR	2036.0651	IPI00116913	IPI00116913	yes	no	2,3	0.0023993	147.16
QIGASPSDDIIFGVFAQSKPDSAEPVN(de)R	2944.4567	IPI0013042C	IPI0013042C	yes	no		3 0.0034386	75.054
QIFFN(de)GTETIR	1324.6776	IPI00338209	IPI00338209	yes	no		2 0.017728	99.752
QHGQFSIAVVGIN(de)ITSIGIR	2109.1695	IPI0012119C	IPI0012119C	yes	no		3 1.9284E-05	113.33
QGPQAGGTTITIN(de)GTHIDTGSKEDVR	2652.3103	IPI00405742	IPI00405742	yes	no		3 0.0005357	85.932
QGPQAGGTTITIN(de)GTHIDTGSK	2153.0713	IPI00405742	IPI00405742	yes	no		2 0.0052563	92.932
QGDQYSCMVGHEAIPMN(de)FTQK	2440.061	IPI0047388C	IPI0047388C	yes	no	2,3	6.0259E-06	120.75
QFWIFDVQNPDDVAKN(de)SSK	2237.0753	IPI00331214	IPI00331214	yes	yes	2,3	1.3492E-14	139.67
QFNCSFEN(de)ITR	1414.6299	IPI0067425E	IPI0067425E	yes	yes		2 0.0034392	122.33
QFN(de)CSFENITR	1414.6299	IPI0067425E	IPI0067425E	yes	yes		2 0.0034392	122.33
QENNIINAHEGNSSIFIEN(de)STFESFGYHSVSPDR	4064.9141	IPI00125813	IPI00125813	yes	no	3,4	0.0073715	49.504
QEMNGTYVCHAFSSHGN(de)VTR	2293.9957	IPI00122973	IPI00122973	yes	no		3 0.022373	58.712
QEIN(de)DSIQVAER	1400.6896	IPI0032042C	IPI0032042C	yes	yes		2 1.4657E-29	199.8
QDIAISGN(de)ISSIYAMTQDK	2053.999	IPI00405742	IPI00405742	yes	no		2 4.797E-113	244.52
QAIQTMQSEFFYITTNIN(de)DTIEIR	2988.4903	IPI0011813C	IPI0011813C	yes	yes		3 9.6048E-24	127.8
PINETFPVYIE(de)TPKR	1902.0251	IPI00624663	IPI00624663	yes	yes	2,3	1.4076E-35	196.95
PINETFPVYIE(de)TPK	1745.924	IPI00624663	IPI00624663	yes	yes		2 0.015225	82.349
PIN(de)ITDESMFIGTYIIECIPGYIKR	3202.6083	IPI00138061	IPI00138061	yes	no		3 1.2969E-13	124.66
PGAASN(de)ISFQAPFR	1461.7365	IPI0031115E	IPI0031115E	yes	yes		2 0.0029933	108.71
PFFIQN(de)SSMMK	1441.7098	IPI0022622E	IPI0022622E	yes	no		2 0.0040663	101.39
NYTAN(de)ATSSREEAWDYVQAQVK	2530.1724	IPI0010809E	IPI0010809E	yes	no	2,3	5.2182E-38	155.94
NYN(de)FTIACNTK	1344.6132	IPI0032257E	IPI0032257E	yes	no		2 4.5977E-10	174.9
NYKNPN(de)ITISFTAER	1766.8951	IPI0013260C	IPI0013260C	yes	no	2,3	0.0027776	122.63
NYFHYN(de)QSFPPSYNIK	2017.9323	IPI0012926E	IPI0012926E	yes	yes	2,3	1.1708E-12	175.26
NYEVQIFHVN(de)ATVTEEGTGIEFSR	2739.314	IPI00123223	IPI00123223	yes	yes		3 1.2783E-16	125.92
NVNISYTVN(de)DSFFPQRPQKIIANK	2792.461	IPI0038117E	IPI0038117E	yes	yes		3 9.7478E-09	127.17
NVNISYTVN(de)DSFFPQRPQK	2253.1178	IPI0038117E	IPI0038117E	yes	yes	2,3	0	331.34
NVNISYTVN(de)DSFFPQR	1899.9115	IPI0038117E	IPI0038117E	yes	yes		2 0.0054037	91.355
NVNISYIVN(de)DSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3	3.4602E-93	231.86
NVNI(de)SYTVNDSFFPQRPQKIIANK	2792.461	IPI0038117E	IPI0038117E	yes	yes		3 9.7478E-09	127.17
NVNI(de)SYTVNDSFFPQRPQK	2253.1178	IPI0038117E	IPI0038117E	yes	yes	2,3	0	331.34
NVNI(de)SYTVNDSFFPQR	1899.9115	IPI0038117E	IPI0038117E	yes	yes		2 0.0054037	91.355
NVN(de)ISYIVNDSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3	3.4602E-93	231.86
NVAIVAGDTGN(de)ATGIGEQQPTR	2097.0451	IPI00122272	IPI00122272	yes	no		2 0	320.86
NTQADVINASWSVISN(de)STRHEIER	2726.3372	IPI0013218E	IPI0013218E	yes	yes		3 1.3873E-08	130.11
NTQADVINASWSVISN(de)STR	2062.0079	IPI0013218E	IPI0013218E	yes	yes		2 1.3437E-26C	289.76
NTQADVIN(de)ASWSVISNSTRHEIER	2726.3372	IPI0013218E	IPI0013218E	yes	yes		3 1.3873E-08	130.11
NTQADVIN(de)ASWSVISNSTR	2062.0079	IPI0013218E	IPI0013218E	yes	yes		2 1.3437E-26C	289.76
NTGEIN(de)ITSIIDREETPYFIITGYAIDSR	3300.6514	IPI00115793	IPI00115793	yes	no		3 2.7147E-11	109.68
N-te)rminal Se)r/Thr		16						
NTDGTYNYTSIFIVN(de)SSAHR	2259.0556	IPI0012915E	IPI0012915E	no	no		3 0.011	79.514
NTDGTYN(de)YTSIFIVNSSAHR	2259.0556	IPI0012915E	IPI0012915E	no	no		3 0.011	79.514
NSS(de)JGGVINKYDVVIR	1732.9472	IPI00314673	IPI00314673	yes	yes		2 0.0001232	154.88
NSQFDMN(de)STDAIAIK	1582.7297	IPI00346062	IPI00346062	yes	yes		2 1.41E-18	177.38
NSNSN(de)VIQVDQSGIGIPSRDYYINKTENEK	3381.6437	IPI0039684C	IPI0039684C	yes	no		3 2.3468E-07	94.955
NQIVEI(de)EKVVHHPNHSVVDIGIIK	2692.5276	IPI0040914E	IPI0040914E	yes	yes		3 9.2365E-51	148.01
NPSANTFIHINA(de)SSFR	1774.8751	IPI0031553E	IPI0031553E	yes	yes	2,3	4.0686E-12	170.09
NPNN(de)NTIHPNIR	1402.7066	IPI0031950E	IPI0031950E	yes	no		2 5.716E-11	173.72
NPEDVQSPN(de)GSVYTWIR	1847.8438	IPI00112614	IPI00112614	yes	yes		2 1.233E-05	158.29
NPCTSEQN(de)CTSPFSYK	1918.7826	IPI00132474	IPI00132474	yes	yes		2 5.5871E-111	244.05
NPCNITREDY(de)APIVK	1788.8829	IPI0030796E	IPI0030796E	yes	yes	2,3	0.010105	107.46
NNIHFPGHN(de)YTTR	1569.7437	IPI00130271	IPI00130271	yes	no		2 0.0008836	136.27
NNDSTIN(de)NSATTIIGIQDCR	2319.1125	IPI0088174E	IPI0088174E	yes	no		2 6.1938E-06	130.83
NN(de)QTECFNHVR	1417.6157	IPI0012466E	IPI0012466E	yes	no		2 0.0013743	129.34
NN(de)ISREISEIK	1301.6939	IPI0094476C	IPI0094476C	yes	no		2 0.027347	113.69
NN(de)DSTINNSATTIIGIQDCR	2319.1125	IPI0088174E	IPI0088174E	yes	no		2 6.1938E-06	130.83
NMICQWDPGRETYIETN(de)YTIK	2631.2098	IPI0012015E	IPI0012015E	yes	yes		3 2.8746E-05	122.44
NKANIQFGEN(de)GTTISAVTNK	2106.0705	IPI00127447	IPI00127447	yes	yes	2,3	1.3227E-50	211.06
NITVIEPVTQPFIQVTN(de)TTVK	2341.2893	IPI0010853E	IPI0010853E	yes	no	2,3	1.1593E-06	153.36
NITAFN(de)ETIFR	1324.6776	IPI0012470C	IPI0012470C	yes	yes		2 2.6847E-97	237.53
NISTCFSSGDIFAAHN(de)ISER	2225.0171	IPI0012342E	IPI0012342E	yes	no		2 1.0825E-05	127.58
NISFACNPGFFIN(de)GTSSSK	2046.9469	IPI00322463	IPI00322463	yes	no		2 1.8528E-93	230.06
NISFACNPG(de)FFINGTSSSK	2046.9469	IPI00322463	IPI00322463	yes	no		2 1.8528E-93	230.06
NIQAVNEIATISQCN(de)DTSSAAMVQCIR	3106.4846	IPI00138342	IPI00138342	yes	no		3 2.9238E-05	90.1
NIPWYVIAGNHDHIGN(de)VSAQIAYSK	2766.3878	IPI00137491	IPI00137491	yes	yes	2,3	8.4642E-19	173.18
NIN(de)VTSIGFR	1119.6037	IPI00468814	IPI00468814	yes	yes		2 0.0024221	134.3
NIN(de)SSCRPHPGAWIR	1763.8638	IPI0022280E	IPI0022280E	yes	no	2,3	0.004996	117.86
NIMTIVHFYN(de)K	1378.7067	IPI00119822	IPI00119822	yes	no		2 0.0061771	113.22
NIMIDIQKDTAV(de)EGEEIEVNCTAMASKPATTIR	3647.7845	IPI00856723	IPI00856723	yes	no	3,4	0.0025413	69.47
NIKRPYIVPIIWIN(de)ETGTIGDEK	2668.4588	IPI00331214	IPI00331214	yes	yes		3 4.0328E-08	147.53
NIINDYVSN(de)QTQGMKEIIESEIDER	2921.4441	IPI0013183C	IPI0013183C	yes	no	3,4	0.0015781	85.518
NIINDYVSN(de)QTQGMK	1836.904	IPI0013183C	IPI0013183C	yes	no	2,3	0	263.99
NIGGIETEDDYGYQGHVQTCN(de)FSAQMAK	3132.3553	IPI0012676E	IPI0012676E	yes	yes		3 1.7914E-13	136.56
NIFIN(de)HSETASAK	1430.7154	IPI0040914E	IPI0040914E	yes	yes		2 5.9772E-24	289.38
NI(de)TSPVGVQPIINEHTFCAGITK	2495.2842	IPI0040914E	IPI0040914E	yes	yes		2 1.2345E-24	178.32
NHNGQGYKQDPASFGNNSIIN(de)SSR	2832.3175	IPI00848693	IPI00848693	yes	yes		3 1.0136E-11	138.82
NHAVSFDPISAVKN(de)FSEAASDFHR	2792.3307	IPI00113042	IPI00113042	yes	no		3 6.1592E-09	124.08
NGTAHGN(de)STHPMHSR	1602.707	IPI00128484	IPI00128484	yes	yes		2 0.030639	71.354
NGNATI(de)IR	857.47191	IPI0098582E	IPI0098582E	no	no		2 0.010982	137.14
NGNATI(de)IR	857.47191	IPI0098582E	IPI0098582E	no	no		2 0.010982	137.14
NGNA(de)TIIR	857.47191	IPI0098582E	IPI0098582E	no	no		2 0.010982	137.14
NGNA(de)TIIR	857.47191	IPI0098582E	IPI0098582E	no	no		2 0.010982	137.14

NGIASGSGN(de)CSTGPNGDGSFHAWSIIEVK	2918.3253	IPI00322497	IPI00322497	yes	yes		3	3.9877E-15	154.7
NGHITN(de)YTVVYR	1435.7208	IPI00110264	IPI00110264	yes	yes		2	1.3795E-74	195.77
NGDAYGYN(de)DSIK	1478.6314	IPI00471081	IPI00471081	yes	yes		2	0.0073169	104.55
NFN(de)DSIHSISQAIR	1600.7958	IPI00263041	IPI00263041	yes	yes		2	0.0036613	106.42
NF(de)TAADWGHRS	1260.5636	IPI0033988E	IPI0033988E	yes	no		2	2.3463E-07	167.71
NF(de)NVEKINGEWHTIIASDKR	2483.2921	IPI0096896E	IPI0100832E	no	no		3	7.5417E-51	209.23
NEDRPIAPCGAIANSFMNDTIEIYIVAN(de)ESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no		4	5.6416E-17	104.9
NEDRPIAPCGAIANSFMN(de)DTIEIYIVANESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no		4	5.6416E-17	104.9
NAVNCTYKNED(de)DCVVR	1955.8466	IPI00266264	IPI00266264	yes	yes		2	1.2295E-11	171.46
NATIAEQAKI(de)PATEKPVIIISK	2221.2682	IPI0012334E	IPI0012334E	yes	yes		2	3.2792E-05	136.46
NAKGDEKEN(de)ITAEADISIK	2158.1117	IPI0012472E	IPI0012472E	yes	no	2,3		9.9907E-50	208.98
NAIQAFGN(de)GTDVNMSPK	1762.8308	IPI0011635E	IPI0011635E	yes	no		2	0.0008695	139.08
NAINITFHAQN(de)IGEGGAYEAEIR	2487.2142	IPI0011597E	IPI0011597E	yes	yes	2,3		7.1084E-16	260.53
N(de)YTDCTSEGR	1201.467	IPI0011353E	IPI0011353E	yes	no		2	0.012817	110.84
N(de)YTANATSSREEAWDYVQAQVK	2530.1724	IPI0010809E	IPI0010809E	yes	no	2,3		5.2182E-38	155.94
N(de)YSIFIADINQER	1581.7787	IPI0033131E	IPI0033131E	yes	no		2	3.5051E-14	259.68
N(de)VTYGTYIDDPDPDDGFNYK	2307.9808	IPI0039995E	IPI0039995E	yes	no		2	1.8101E-11	243.97
N(de)VTIECPFKR	1262.6441	IPI0031005E	IPI0031005E	yes	no		2	0.0025219	142.43
N(de)VSCIWCNENK	1422.602	IPI0037764E	IPI0037764E	yes	no		2	0.0056913	110.8
N(de)TTSYPPMCSQDAVGGQVISEIFTNRK	2999.4117	IPI0038728E	IPI0038728E	yes	yes		3	0.0075054	59.429
N(de)TTSYPPMCSQDAVGGQVISEIFTNR	2871.3167	IPI0038728E	IPI0038728E	yes	yes		3	0.0017403	70.316
N(de)TTSAAAMVHCIR	1359.6387	IPI0013121E	IPI0013121E	yes	yes		2	0.022139	85.845
N(de)TTPDEISAVITAVIQDVR	2154.1532	IPI0012183E	IPI0012183E	yes	no		3	1.9378E-47	166.52
N(de)TTCQDIQIEVK	1447.6977	IPI00131091	IPI00131091	yes	no		2	0.0014169	139.46
N(de)STKEEIIAAIEK	1444.7773	IPI0092832E	IPI0092832E	yes	no		2	9.0222E-13	171.26
N(de)STIQAANIAGIK	1299.7147	IPI00222937	IPI00222937	yes	no		2	4.8254E-45	210.38
N(de)RTDVEYEIDEK	1509.6947	IPI0013474E	IPI0013474E	yes	yes		2	0.0051648	124.42
N(de)QTIEIHVIYGPR	1538.8205	IPI0012297E	IPI0012297E	yes	no		2	1.4301E-44	208.27
N(de)QSVGDPNVDIIR	1425.7212	IPI0012744E	IPI0012744E	yes	yes		2	3.6498E-70	221.86
N(de)MTIFSDIVAOK	1366.6803	IPI00621027	IPI00621027	yes	no		1	0.017961	108.47
N(de)ITVIEPVTQPFIQVTNTTVK	2341.2893	IPI0010853E	IPI0010853E	yes	no	2,3		1.1593E-06	153.36
N(de)ITMFISR	980.51134	IPI0022571E	IPI0022571E	yes	yes		2	0.020632	129.38
N(de)ITFQGPPIK	1113.6182	IPI00111794	IPI00111794	yes	no		2	0.0019991	139.43
N(de)ISVVVATHSPTIAK	1535.8671	IPI0022141E	IPI0022141E	yes	no		2	0.0005383	127.57
N(de)ISTCFSSGDIFAAHNISER	2225.0171	IPI0012342E	IPI0012342E	yes	no		2	1.0825E-05	127.58
N(de)ISGVVIADHSGSFHNR	1808.8918	IPI00118674	IPI00118674	yes	yes	2,3		0.0009579	113.33
N(de)HSIPIETK	1037.5506	IPI00129041	IPI00129041	yes	no		2	0.025728	101.38
N(de)GTAHGNSTHPMHSR	1602.707	IPI00128484	IPI00128484	yes	yes		2	0.030639	71.354
N(de)FSGYYIGVGR	1231.5986	IPI00458077	IPI00458077	yes	yes		2	0.0060906	109.24
N(de)ETHSICSACDESCK	1796.6764	IPI0011128E	IPI0011128E	yes	yes		2	0.0042083	98.582
N(de)CSTQHFPR	1145.5036	IPI00322304	IPI00322304	yes	yes		2	0.029084	98.044
N(de)ATYGHYEPGEEFHDVEDAETYKK	2828.2202	IPI0022179E	IPI0022179E	yes	no		3	9.9445E-09	147.35
N(de)ATVVVWMKDNIR	1445.7449	IPI0012137E	IPI0012137E	yes	no		2	0.0159	109.44
N(de)ATVVVWMK	947.48987	IPI0012137E	IPI0012137E	yes	no		2	0.0056545	147.19
N(de)ATYPPMCSQDAAR	1681.7188	IPI0012839E	IPI0012839E	yes	yes		2	0.0008967	141.34
N(de)ATSYPPMCSQDAGWAK	1882.7978	IPI0013834E	IPI0013834E	yes	yes		2	0.0003233	141.86
N(de)ATSYPPMCFQDPVTGQIVNDIITNRK	3078.4903	IPI0013121E	IPI0013121E	yes	yes		3	0.0066506	61.616
N(de)ATIVNEADKIR	1342.7205	IPI0031950E	IPI0031950E	yes	no		2	0.0050047	133.15
N(de)ASSEYSGTYSCTVQNR	1922.8065	IPI0027037E	IPI0027037E	yes	no		2	0.013173	80.545
MYVTN(de)DTEVAENNYEAIKDFFR	2668.2115	IPI0065853E	IPI0065853E	yes	no	2,3		1.7084E-09	160.67
MYVTN(de)DTEVAENNYEAIK	2102.9467	IPI0065853E	IPI0065853E	yes	no		2	0.002322	100.45
MYSEGSDIVPQSN(de)ETAIHYFKK	2543.2002	IPI0013114E	IPI0013114E	yes	no	2,3		4.4657E-10	163.41
MYSEGSDIVPQSN(de)ETAIHYFK	2415.1053	IPI0013114E	IPI0013114E	yes	no	2,3		4.9294E-06	149.95
MVN(de)TTFICTATNAVGTGR	1912.9135	IPI0010937E	IPI0010937E	yes	no	2,3		1.366E-204	278.07
MVN(de)HSIHPTEPVK	1487.7555	IPI00750217	IPI00750217	yes	no		2	0.0026341	136.3
MTISQN(de)NSIIR	1275.6605	IPI0010853E	IPI0010853E	no	no		2	1.9515E-19E	227.37
MSVINFEKN(de)K	1240.558	IPI00308971	IPI00308971	yes	yes		2	0.029398	91.937
MSTIIHHPQYAWIQDIGIREGNEGVYN(de)GSWGGR	3911.8802	IPI00230084	IPI00230084	yes	no		4	1.4956E-25	121.02
MSQHPIDIQEDFNATIVN(de)ASSIIPK	2881.428	IPI0076281E	IPI0076281E	yes	yes		3	0.0045299	61.437
MSPWSN(de)WSECDPCIK	1895.7641	IPI0023071E	IPI0023071E	yes	no		2	0.0011665	120.92
MRSPGAQD(de)NVSVSQGMR	1818.8465	IPI0034858E	IPI0034858E	yes	no		3	7.2362E-18	177.58
MQVVSN(de)GTVTTAIWR	1661.8559	IPI0033117E	IPI0033117E	yes	no		2	0.002987	109.07
MQDTIEHHVNVSDTSAIPSTIEYGN(de)R	2913.3563	IPI0012095E	IPI0012095E	yes	yes		3	1.177E-13	124.4
MQDTIEHHVN(de)VSOTSAIPSTIEYGNR	2913.3563	IPI0012095E	IPI0012095E	yes	yes		3	1.177E-13	124.4
MPSQASAGNVYPQPIIN(de)SSMCIEDSR	2851.2939	IPI0022475E	IPI0022475E	yes	yes		3	0.0003784	80.102
MPFPIDQDFYVSPFTQDIIN(de)R	2542.2202	IPI0031817E	IPI0031817E	yes	yes		3	0.0001637	102.69
MNPDIDTGHN(de)TSAPAHWGEIK	2290.0437	IPI0031442E	IPI0031442E	yes	no		3	0.0026798	79.97
MN(de)MSVITIQEYEFEK	1860.8638	IPI0046143E	IPI0046143E	yes	yes		2	1.461E-12	172.91
MIVSNIDIGPTIIDIAGYDIN(de)KTQMDGMSIPIIK	3801.997	IPI0022142E	IPI0022142E	yes	yes		4	0.0039151	54.003
MIHN(de)TTGVYTCSAHGTWTNEVIK	2775.3221	IPI0047520E	IPI0047520E	yes	no	3,4		0.0008498	87.062
MIHN(de)TTGVYTCSAHGTWTNEVIK	2619.221	IPI0047520E	IPI0047520E	yes	no		3	0.013091	64.705
MIEN(de)GSISFIPTIR	1576.8283	IPI00123194	IPI00123194	yes	yes	2,3		3.5123E-75	222.75
MHING(de)SNVQVIHR	1503.7729	IPI0011906E	IPI0011906E	yes	yes	2,3		1.1665E-07	160.18
MGDREAIGN(de)ASQIFDSWIK	2137.0262	IPI0013458E	IPI0013458E	yes	yes	2,3		1.2101E-07	163.53
MFSQN(de)DTR	997.42873	IPI0012925E	IPI0012925E	yes	yes		2	0.018992	131.06
MENGN(de)ISTVTVFVFTGFPQIK	2328.1824	IPI0012668E	IPI0012668E	yes	yes		3	0.031301	36.253
MEISVGAIQAN(de)R	1287.6605	IPI00108811	IPI00108811	yes	yes		2	0.0015118	117.86
MEAHNVSAFPN(de)FSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4		1.1536E-39	197.86
MEAHN(de)VSAPFNFSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4		1.1536E-39	197.86
MDYNSFQGTSPN(de)ETK	1717.7254	IPI00876541	IPI00876541	yes	no		2	0.0022789	113.65
MDTSMN(de)FSR	1087.4427	IPI0013621E	IPI0013621E	yes	yes		2	5.7379E-48	218.6
MDGHCAPIRTEAGVFEYVADPTFEN(de)FTGGVKK	3542.6599	IPI0040574E	IPI0040574E	yes	no	3,4		0.0018423	77.522
MDGHCAPIRTEAGVFEYVADPTFEN(de)FTGGVK	3414.5649	IPI0040574E	IPI0040574E	yes	no		3	4.2349E-15	113.64
MDFIIFN(de)YSAPSYIR	1835.8916	IPI0055350E	IPI0055350E	yes	yes		2	0.0006942	127.75
MDEFNCFNSTFWN(de)ISIIK	2003.9121	IPI0042041E	IPI0042041E	yes	yes		2	1.4902E-60	214.22
MDEFNCFN(de)STFWNISIIK	2003.9121	IPI0042041E	IPI0042041E	yes	yes		2	1.4902E-60	214.22

MASN(de)NTASIAQAR	1333.6408	IPI00230194	IPI00230194	yes	yes		2	0.031968	34.386
MAIIQYGSQNNQVAFPIYIN(de)VTTIHEAIER	3562.7879	IPI00621027	IPI00621027	yes	yes		4	2.2495E-15	109.68
MAAAINATGRPIAFSCSWPAYEGGIPPKVN(de)YTEVSR	3880.9029	IPI00315593	IPI00315593	yes	no		4	2.194E-06	88.986
MAAAIN(de)ATGRPIAFSCSWPAYEGGIPPKVNYTEVSR	3880.9029	IPI00315593	IPI00315593	yes	no		4	2.194E-06	88.986
KYQTIN(de)CSVNVR	1480.7456	IPI00420835	IPI00420835	yes	no		2	0.0053616	109
KYHDYYITSTSN(de)GSIEGIENR	2446.1401	IPI00130754	IPI00130754	yes	yes	2,3		1.2006E-14	173.21
KYFDQVDIS(de)NGIDWSIDHK	2279.0859	IPI00133456	IPI00133456	yes	yes	2,3		1.6131E-48	207.43
KYEQAKN(de)ISQDIEK	1692.8683	IPI01027808	IPI01027808	yes	no		2	1.5929E-35	196.95
KWPERISAI(de)DNIIHSSIFIK	2480.354	IPI00123342	IPI00123342	yes	yes		3	1.2837E-05	126.84
KWGH(de)NVTEFQQR	1528.7535	IPI00754386	IPI00754386	yes	yes		2	0.0013287	141.37
KVVVVEQN(de)GSFQVK	1559.8671	IPI00463399	IPI00463399	yes	no		2	0.030111	98.105
KVPSN(de)STETVIESDQFQPGVR	2317.155	IPI00119299	IPI00119299	yes	no	2,3		4.2828E-06	126.84
KVIVAPPSEAN(de)TTK	1582.8566	IPI00875419	IPI00875419	no	no		2	0.0018504	131.72
KVIIN(de)NSIDEPR	1396.7674	IPI00411145	IPI00411145	yes	no		2	0.0018539	124.86
KVEVEPIN(de)STAVHVSWK	1922.0262	IPI00110264	IPI00110264	yes	yes	2,3		1.2249E-75	225.01
KVEVEAVN(de)ATAVK	1356.7613	IPI00608063	IPI00608063	yes	no		2	4.022E-25	187.16
KVEAEAIN(de)ATAIR	1384.7674	IPI00754853	IPI00754853	yes	no		2	0.0014818	120.92
KVDN(de)ASIVADDMR	1432.698	IPI00356462	IPI00356462	yes	no		2	0.010163	102.64
KVCNGIGIGEFKDTISIN(de)ATNIK	2491.3105	IPI0012119C	IPI0012119C	yes	no		3	2.8943E-17	171.47
KTYAVYDIFDTAMIN(de)NSR	2121.0201	IPI0022679C	IPI0022679C	yes	no	2,3		7.6763E-08	164.53
KTTIEN(de)FTCPPEYK	1629.7709	IPI0042081C	IPI0042081C	yes	yes		2	0.0026961	114.7
KTN(de)QSCEIVIDSTEKVNPSYIGR	2637.3068	IPI00310059	IPI00310059	yes	no		3	1.1796E-32	190.31
KTN(de)QSCEIVIDSTEK	1750.8407	IPI00310059	IPI00310059	yes	no		2	1.3429E-35	196.8
KTMFN(de)STEIK	1197.6064	IPI00677395	IPI00677395	yes	no		2	0.028311	103.08
KTGVHDGDFEYN(de)ITTTIAANK	2407.202	IPI00108849	IPI00108849	yes	no	2,3		3.048E-06	149.36
KTGEAN(de)ITQIYTQEAIDFIQTQHAR	2875.4464	IPI0031009C	IPI0031009C	yes	no		3	1.3073E-84	222.24
KSSQSN(de)QTIWFGHFTTSTIMSPSPGIR	2994.4658	IPI00226714	IPI00226714	yes	no		3	0.0017344	74.748
KSPGYVIDIIVTPQN(de)K	1770.988	IPI00109946	IPI00109946	yes	yes	2,3		0.0016573	137.44
KSEEMINIVN(de)NSKDFVENVTSGNAVDFFPVIR	3611.793	IPI00128287	IPI00128287	yes	yes		3	1.9892E-15	116.28
KSDTQNIIN(de)VSTGR	1694.8588	IPI01023214	IPI01023214	yes	no		2	0.0005768	125.45
KSCHTAVGTSEGNVPMGIIN(de)QTGSCK	3081.4107	IPI0047108C	IPI0047108C	yes	no		3	0.0035791	64.845
KQVTPIFFYFQ(de)NR	1686.8882	IPI00319509	IPI00319509	yes	no	2,3		0.0012534	124.86
KPISQEFAYVN(de)ASGEHGIVVFSIGSMVSEIPEKK	3805.9237	IPI00134691	IPI00134691	yes	no		4	1.1446E-09	98.151
KPIIGHYKPDIAVVIEN(de)GTSIDR	2635.4334	IPI00410796	IPI00410796	yes	no		3	3.263E-08	146.89
KNVNISYTV(de)NDSFFPQRPQK	2381.2128	IPI00381178	IPI00381178	yes	yes	2,3		0	316.97
KNVN(de)ISYTVNDSFFPQRPQK	2381.2128	IPI00381178	IPI00381178	yes	yes	2,3		0	316.97
KNIQAVNEIATISQC(de)NDTSSAAMVQCIR	3234.5795	IPI00138342	IPI00138342	yes	no		3	0.010221	55.063
KN(de)ITSPVGVQPIINEHTFCAGITK	2623.3792	IPI00409148	IPI00409148	yes	yes		3	0.0053493	72.916
KN(de)ISEIWDAYCYR	1716.793	IPI00987265	IPI00987265	yes	no		2	3.957E-13	170.56
KMSN(de)ITFR	995.52224	IPI00460063	IPI00460063	yes	no		2	0.0098274	143.7
KMISAFN(de)ATSGK	1253.6438	IPI00466999	IPI00466999	yes	no		2	0.016333	97.69
KKENGVFEEISN(de)SSGR	1779.8751	IPI00757771	IPI00757771	yes	no	2,3		3.7333E-11	214.81
KITDVETQVIN(de)QTSR	1730.9163	IPI0011435C	IPI0011435C	yes	yes		2	0.0013426	121.27
KISTN(de)ITIVCKPGDIESAPVIR	2410.3254	IPI00308971	IPI00308971	yes	yes		3	8.3826E-06	124.2
KIPIN(de)FTEGAR	1244.6877	IPI00129243	IPI00129243	yes	no		2	0.020314	93.345
KINIDGSN(de)YTIK	1477.814	IPI00119063	IPI00119063	yes	yes		2	6.4418E-34	199.13
KIN(de)CSQEVPGSSQCDREPEPR	2472.1122	IPI00881836	IPI00881836	yes	yes		3	4.7935E-05	145.91
KIIASPNEEN(de)MTEIISMR	2075.0391	IPI00322575	IPI00322575	yes	no	2,3		4.2185E-08	164.93
KIDFIVIN(de)ETR	1346.7558	IPI00125813	IPI00125813	yes	no	2,3		2.9038E-14	178.15
KHYQVTGYGIN(de)GTGDSNDFWR	2414.104	IPI00221669	IPI00221669	yes	no		3	0.0006841	115.26
KGIVSGGVYNHSHVGCIPYTIPPCEHHV(de)NGSRPPCTGEGDTPF	4558.1329	IPI00113517	IPI00113517	yes	yes		4	0.0058732	44.674
KGCADYCN(de)QTITK	1557.6916	IPI00987265	IPI00987265	yes	no		2	0.0012733	124.51
KFPVPFQKEN(de)VTATIVEIGR	2272.258	IPI00134691	IPI00134691	yes	yes	2,3		6.5926E-28	188.58
KFN(de)STQIAAMAPEHEEPR	2054.9844	IPI00856861	IPI00856861	yes	no		3	0.0003056	130.01
KFHVN(de)YTQPIVAVK	1642.9195	IPI00123704	IPI00123704	yes	no		2	0.0030233	134.21
KFEAENISN(de)YTAIISQDGK	2240.1325	IPI00464135	IPI00464135	yes	no	2,3		6.8226E-11	168.68
KFEAEN(de)ISNYTAIISQDGK	2240.1325	IPI00464135	IPI00464135	yes	no	2,3		6.8226E-11	168.68
KEQETCIAPEIEHGN(de)YSTTQR	2490.1445	IPI00122117	IPI00122117	yes	yes	2,3		6.3316E-06	138.28
KENGVFEEISNS(de)SGR	1651.7802	IPI00757771	IPI00757771	yes	no		2	5.1915E-47	207.55
KENG(de)VFEEISNSSGR	1651.7802	IPI00757771	IPI00757771	yes	no		2	5.1915E-47	207.55
KEN(de)SSYQVINWR	1522.7528	IPI00153316	IPI00153316	yes	yes	2,3		6.5952E-81	228.78
KEN(de)SSEICSNNGECVCGQCVCVR	2646.0349	IPI00132474	IPI00132474	yes	no		3	4.2464E-06	137.13
KEDSCQIN(de)YSEGPCIGMQER	2400.0144	IPI00127352	IPI00127352	yes	yes	2,3		1.7983E-20	182.82
KDTCAQECSHFN(de)ITKVESR	2309.0529	IPI00132474	IPI00132474	yes	no		3	3.9812E-12	171.29
KDTCAQECSHFN(de)ITK	1837.8087	IPI00132474	IPI00132474	yes	no	2,3		4.2721E-11	243.04
KDGSQDFN(de)ETWENYEK	1988.8388	IPI00128206	IPI00128206	yes	yes		2	0.0003688	149.52
KDGAFFHHIHPFGN(de)YSFISVDATQRPQPK	3310.6272	IPI00226714	IPI00226714	yes	no		3	0.0050269	67.899
KDDEPIETTDFN(de)TTK	1809.8269	IPI00129968	IPI00129968	yes	yes		2	0.0025101	111.06
KCEVIC(de)NQSINKPITITVEQSR	2503.2523	IPI00626537	IPI00626537	yes	yes		3	2.0927E-05	124.08
KCEAN(de)ITISSPAR	1445.7297	IPI00894972	IPI00894972	yes	no		2	0.017489	90.444
KAWGISVINPN(de)KTK	1554.8882	IPI00989096	IPI00989096	yes	yes	2,3		0.0015686	125.73
KAFITN(de)FSMIIDGVTPGVVKEK	2556.3662	IPI00312711	IPI00312711	yes	no		3	2.9459E-32	186.01
KAFITN(de)FSMIIDGVTPGVVVK	2299.2286	IPI00312711	IPI00312711	yes	no	2,3		7.9483E-06	145.04
K(de)IVYIEHNIKNSTK	1928.0731	IPI0092832C	IPI0092832C	yes	no	2,3		1.0029E-11	173.28
IYWTGDGNISMANMDGSN(de)HTIIFSGQKGPVGIADFPEK	4325.0409	IPI00119063	IPI00119063	yes	yes		4	0.0006539	51.264
IYWTGDGNISMANMDGSN(de)HTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes	2,3		3.1478E-14	125.73
IYWTGDGN(de)ISMANMDGSNHTIIFSGQKGPVGIADFPEK	4325.0409	IPI00119063	IPI00119063	yes	yes		4	0.0006539	51.264
IYWTGDGN(de)ISMANMDGSNHTIIFSGQK	3014.3539	IPI00119063	IPI00119063	yes	yes	2,3		3.1478E-14	125.73
IYWISSGNHTIN(de)R	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		7.0216E-19	155.08
IYWISSGN(de)HTINR	1559.7845	IPI00119063	IPI00119063	yes	yes	2,3		7.0216E-19	155.08
IYVIDGTQN(de)DTAFVFP	1954.9789	IPI00308658	IPI00308658	yes	no		2	0.0004842	131.72
IYSDQCHHNISIPPPTEIVCN(de)R	2762.3269	IPI00123442	IPI00123442	yes	yes		3	0.0023875	81.878
IYSDQCHHN(de)ISIPPPTEIVCN	2762.3269	IPI00123442	IPI00123442	yes	yes		3	0.0023875	81.878
IYNVTHQFCN(de)ASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3		1.1616E-28	189.9
IYN(de)VTHQFCNASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3		1.1616E-28	189.9
IYIRN(de)ESEFRDK	1568.7947	IPI00115976	IPI00115976	yes	yes		3	0.013929	110.66



IYIDHNN(de)ITR	1257.6466	IPI00120187	IPI00120187	yes	yes		2	0.0023201	131.83
IYAGMVSIMDEAVGNV(de)TK	1896.9325	IPI0065235E	IPI0065235E	yes	no		2	2.3805E-20	149.95
IWIPVN(de)ITWADIEDKDGR	2140.0953	IPI0012625C	IPI0012625C	yes	no		2	2.5486E-07	161.99
IVTQTIPCN(de)KTIFWSK	1935.0288	IPI0030796E	IPI0030796E	yes	yes		2	0.032618	106.42
IVTQTIPCN(de)K	1172.6223	IPI0030796E	IPI0030796E	yes	yes		2	7.9334E-19	190.96
IVSDVQTAVKTN(de)SSFIQGFVDHVKEDCDR	3293.5987	IPI0092832C	IPI0092832C	yes	no		3	0.004246	73.655
IVQDVAN(de)NTNEEAGDGTATVIAR	2559.2413	IPI0030888E	IPI0030888E	yes	no	2,3		2.5918E-18	172.37
IVPCEFGVIYPIAEN(de)FSR	2110.0557	IPI0012190E	IPI0012190E	yes	no		3	0.016122	75.911
IVKIPSGTIVISN(de)ATEGDGGIYR	2359.2747	IPI0012915E	IPI0012915E	yes	no		3	6.2812E-08	140.63
IVGSPFIGCTVVN(de)K	1489.7963	IPI0013480E	IPI0013480E	yes	no		2	1.8161E-08	162.93
IVEDIESFIKPYSVVEEQKN(de)ITSCPDGAPFIQHGPDYR	4278.0579	IPI0012422I	IPI0012422I	yes	yes		4	0.0003879	77.522
IVDVN(de)ITSEGVK	1400.7875	IPI0011352E	IPI0011352E	yes	no		2	0.0025652	143.94
IVDVN(de)ITSEGK	1173.6241	IPI0011352E	IPI0011352E	yes	no		2	0.0017004	124.12
IVAN(de)ISGCAAVNSETIMCCIR	2338.0902	IPI0022248E	IPI0022248E	yes	yes	2,3		9.1833E-22	184.6
IV(de)VPINNRENISDPTSPIR	2133.1542	IPI0013692E	IPI0013692E	yes	no	2,3		0.0032271	105.39
ITYESGFIN(de)YSK	1420.6874	IPI00666034	IPI00666034	yes	no		2	0.0003681	143.98
ITWSNAN(de)GTASYR	1439.6793	IPI0046942E	IPI0046942E	yes	no		2	0.0011366	141.34
ITVVYAEN(de)GTVIQGTTVASVYK	2312.2264	IPI0031735E	IPI0031735E	yes	yes	2,3		2.197E-16	177.08
ITVPSSQN(de)SSFR	1321.6626	IPI0051536C	IPI0051536C	yes	no		2	0.011516	93.345
ITSCATN(de)ASMCGDEAR	1742.7022	IPI0011906E	IPI0011906E	yes	yes		2	0	309.88
ITN(de)VTFPTGVVTNIHGDMDK	2158.0729	IPI0079846E	IPI0079846E	yes	no	2,3		0.0011045	96.234
ITN(de)QTIGFSAFEQDIPVK	2106.0997	IPI0062466E	IPI0062466E	yes	yes	2,3		0	321.68
ITIEVDPVPKPSIEIN(de)KTEASTDSCHIR	3295.6758	IPI0010994E	IPI0010994E	yes	yes		3	2.7418E-11	110.83
ITIAIN(de)NTITPHTIPPGTIVYK	2376.3417	IPI0030923C	IPI0030923C	yes	no	2,3		4.5159E-22	184.01
ITHIPDDIPSNITVIN(de)ITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes		3	0.0001812	92.993
ITHIPDDIPSN(de)ITVINITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes		3	0.0001812	92.993
ITFFNSTIN(de)TSGIVAQGEAIPGHRPGIVTK	3405.8409	IPI00153317	IPI00153317	yes	yes	3,4		3.6028E-16	115.55
ITFFN(de)STINTSGIVAQGEAIPGHRPGIVTK	3405.8409	IPI00153317	IPI00153317	yes	yes	3,4		3.6028E-16	115.55
ITEFTHN(de)STMDYK	1585.7083	IPI0013001C	IPI0013001C	yes	no		2	0.001008	141.37
ITDTICGVGNMSAN(de)ASDQER	2137.9368	IPI0011406E	IPI0011406E	yes	no		2	7.2709E-06	127.49
ITDTICGVGN(de)MSANASDQER	2137.9368	IPI0011406E	IPI0011406E	yes	no		2	7.2709E-06	127.49
ITDNMFCAGFKVN(de)DTK	1859.8546	IPI0011420E	IPI0011420E	yes	yes		2	0.010723	104.45
ITAN(de)STWQPKAK	1458.7467	IPI0065367E	IPI0065367E	yes	no		2	3.587E-32	199.13
ISVPDGIKVSND(de)SSAR	1528.8209	IPI0012076I	IPI0012076I	yes	no		2	0.0083016	110.84
ISTSPFAIN(de)ITMIPK	1631.8957	IPI00666034	IPI00666034	yes	no		2	6.8266E-08	163.8
ISTNI(de)TIVCKPGDIESAPVIR	2282.2304	IPI0030897I	IPI0030897I	yes	yes		2	9.4587E-29	187.43
ISQN(de)ASIGPHVRPIPIQYEDKEVEPGTICDVAGWGVVTHAGR	4552.2921	IPI0011694E	IPI0011694E	yes	no		4	1.3488E-25	115.9
ISQAIGN(de)ITVVQK	1369.7929	IPI0011203E	IPI0011203E	yes	no		2	0.0079124	96.866
ISPIHAIAN(de)FSIDPK	1663.9297	IPI0011597E	IPI0011597E	yes	yes		2	0.0031121	104.95
ISPGGAEMFQVQDMVVSQEKGND(de)CSIQR	2994.3998	IPI00130117	IPI00130117	yes	no		3	0.0002291	87.319
ISNISN(de)ISHDIVQEATDHAYNIQQEAEISR	3509.6659	IPI0022344E	IPI0022344E	yes	yes	3,4		3.6342E-20	125
ISN(de)VTPEDAGTYCVK	1815.8349	IPI0012915E	IPI0012915E	yes	no		2	1.6703E-08	167.69
ISN(de)ITIIEMEKEKESAR	1845.987	IPI0035646E	IPI0035646E	yes	no		2	0.016498	97.235
ISISEN(de)YTISIANAK	1622.8516	IPI0012137E	IPI0012137E	yes	no		2	0.0005461	146.59
ISHYN(de)DTYPISPQR	1786.8638	IPI0011303E	IPI0011303E	yes	no	2,3		1.2203E-91	229.68
ISHYKQN(de)FSFCR	1585.746	IPI0038130E	IPI0038130E	yes	yes	2,3		0.026539	101.53
ISHEN(de)GTIICSK	1357.666	IPI00338094	IPI00338094	yes	yes		2	0.0026811	112.43
ISHDGN(de)ETIPIHIYVK	1834.9577	IPI0040574E	IPI0040574E	yes	no	2,3		0	312.78
ISGNSIHN(de)ASIPHEHIAYGSVITVK	2506.318	IPI0022166E	IPI0022166E	yes	no	2,3		5.0277E-10	152.47
ISGN(de)ITIIR	985.59203	IPI00137311	IPI00137311	yes	yes		2	0.017366	115.57
ISGKPTN(de)VSVMSEGDGICY	2312.1028	IPI0047388C	IPI0047388C	yes	no		2	2.483E-39	199.97
ISFGSN(de)HSDFK	1237.5728	IPI0012147E	IPI0012147E	yes	no		2	0.019647	88.338
ISEN(de)GSSVAGIISPMEK	1918.9306	IPI0039979E	IPI0039979E	yes	no		2	7.4072E-06	158.44
ISEGNRTIINVTRN(de)DTGPPVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no		4	9.0003E-07	102.48
ISEGNR(de)TITIINVTRNDTGPVVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no		4	9.0003E-07	102.48
ISEGN(de)RTITIINVTRNDTGPVVCETR	2978.488	IPI0010853E	IPI0010853E	yes	no		4	9.0003E-07	102.48
ISEEFIKN(de)ISASAR	1563.8257	IPI0089497C	IPI0089497C	yes	no	2,3		9.2053E-08	160.8
ISDTN(de)ITAIPQGIPTSITEVHIDGNKITKVDAPSIK	3786.0415	IPI0012319E	IPI0012319E	yes	yes	3,4		0.001957	70.109
ISDTN(de)ITAIPQGIPTSITEVHIDGNKITK	3075.6452	IPI0012319E	IPI0012319E	yes	yes		3	1.205E-08	103.03
ISDTN(de)ITAIPQGIPTSITEVHIDGNK	2733.4185	IPI0012319E	IPI0012319E	yes	yes		2	0.0001915	83.826
ISCAFKTEN(de)QTR	1453.6984	IPI0012024E	IPI0012024E	yes	no		2	0.018894	105.95
ISASGAEIEAIEAQVIN(de)ISIK	2155.1736	IPI00312711	IPI00312711	yes	no	2,3		1.3926E-18	267.39
ISAIIDNIIN(de)HSSIFIKGAR	2068.1429	IPI0012334E	IPI0012334E	yes	yes		3	0.0009926	115.5
ISAIIDNIIN(de)HSSIFIK	1783.9832	IPI0012334E	IPI0012334E	yes	yes	2,3		1.1663E-15	262.23
IRPIFN(de)KSFESTVGQSDTYSYIFR	2911.4505	IPI00108844	IPI00108844	yes	yes	3,4		4.332E-13	163.91
IRPHFISVCDPDFSQIN(de)CSEGYIQNYR	3314.5237	IPI0011562E	IPI0011562E	yes	yes	3,4		1.1064E-38	191.4
IRNPCTSE(de)QNCTSPFSYK	2187.9677	IPI00132474	IPI00132474	yes	yes	2,3		8.0652E-12	170.11
IRN(de)SSIGGVINKYDVVIR	2002.1324	IPI0031467E	IPI0031467E	yes	yes		3	0.0020814	111.01
IRDYEEN(de)SSSCHKEVQIIK	2334.1274	IPI00330594	IPI00330594	yes	yes		3	0.023303	86.488
IRDQEIEDNVHISPND(de)GSITIVGTRPSNHGAYR	3657.8612	IPI0051536C	IPI0051536C	yes	yes	3,4		0.0021588	73.13
IRAEQITHAIGIGEAN(de)KTQIR	2431.3659	IPI0067579E	IPI0067579E	yes	no		3	1.1421E-05	135.49
IQVTIYN(de)CSFGR	1456.7133	IPI0040574E	IPI0040574E	yes	no		2	5.6743E-06	153.39
IQKENDNFN(de)ISKDDIDITIFHGENK	2946.4359	IPI0067425E	IPI0067425E	yes	yes		3	8.1655E-09	123.6
IQIEFRPIDIN(de)STAAGIPR	2110.1535	IPI0011551C	IPI0011551C	yes	yes	2,3		0.0009243	145.86
IQDIEITGSPVSNISAHIFSN(de)ISSIEK	2898.4975	IPI0011952E	IPI0011952E	yes	yes	2,3,4		1.035E-10	109.68
IQDIEITGSPVSN(de)ISAHIFSNISSIEK	2898.4975	IPI0011952E	IPI0011952E	yes	yes	2,3,4		1.035E-10	109.68
IQDFIVDNETFSGFIQHN(de)ISIPR	2689.35	IPI00112614	IPI00112614	yes	yes	2,3		6.8688E-06	106.73
IQDFIVDN(de)ETFSGFIQHNISIPR	2689.35	IPI00112614	IPI00112614	yes	yes	2,3		6.8688E-06	106.73
IQCVDGN(de)WTTIPVCIEEER	2318.0671	IPI0013001C	IPI0013001C	yes	no		2	5.6683E-27	186.15
IPSSIENATSISIMN(de)ITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes		3	7.0869E-21	131.79
IPSSIEN(de)ATSISIMNITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes		3	7.0869E-21	131.79
IPNNTQWITW(de)SPEGHK	1906.9326	IPI0012581E	IPI0012581E	yes	no	2,3		3.1182E-12	171.78
IPN(de)ISIDVIQPSFPEIIIESHMVMIR	2990.5973	IPI0022166E	IPI0022166E	yes	no		3	3.7575E-14	126.02
IPFSPENTREEDFYVNETST(de)VK	2601.2235	IPI0011610E	IPI0011610E	yes	yes		3	0.017198	77.899
IPEN(de)QTIPGEIPEHAGPAEGVHDSR	2649.2783	IPI0085622I	IPI0085622I	yes	yes		3	0.0001158	90.464
INSAPVEGYSEHVGN(de)KTTIR	2171.0971	IPI0034983C	IPI0034983C	yes	no		2	7.7829E-05	119.62

INSAPVEGYSEHVGN(de)K	1699.8166	IPI0034983C	IPI0034983C	yes	no	2	0.0008457	142.54
INNGGCQDICIITHQGHVN(de)CSCR	2712.1737	IPI00119063	IPI00119063	yes	yes	3	0.0020384	82.609
INN(de)ITNIGPIDMK	1441.7599	IPI0033068C	IPI0033068C	yes	no	2	0.0008211	125.73
INMTIPDAIVPTFSISN(de)HSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3	2.2738E-15E	254.32
INIDGSNY(de)TIK	1349.7191	IPI00119063	IPI00119063	yes	yes	2	5.716E-11	173.72
INETHIFN(de)GSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	8.1919E-08	160.65
IN(de)YTCNQGYR	1287.5666	IPI00138061	IPI00138061	yes	no	2	6.6974E-37	205.53
IN(de)YSIPTGQSMEVQIPK	1903.9713	IPI0040393E	IPI0040393E	yes	no	2	3.6852E-36	199.15
IN(de)VTSPDIFR	1160.619	IPI00116913	IPI00116913	yes	yes	2	0.0019593	139.86
IN(de)VTEVYDKIKR	1476.83	IPI00225072	IPI00225072	yes	no	2	0.0073012	127.79
IN(de)VTEVYDKIK	1320.7289	IPI00225072	IPI00225072	yes	no	2	0.0001505	154.15
IN(de)VTEVYDK	1079.5499	IPI00225072	IPI00225072	yes	no	2	0.024878	120.06
IN(de)VSYTGERPSSNMVIVDVK	2207.1256	IPI00624663	IPI00624663	yes	yes	2,3	3.6877E-05	141.13
IN(de)VSYTGER	1037.5142	IPI00624663	IPI00624663	yes	yes	2	0.0045109	133.81
IN(de)VSHAGAPIGEEYIIVFSR	2171.1375	IPI00785452	IPI00785452	yes	no	3	0.0004278	99.663
IN(de)TTSDEKDPTNPFRFPNIGVEK	2618.2976	IPI00131881	IPI00131881	yes	no	3	0.03739	76.176
IN(de)TTSDEKDPTNPFR	1733.822	IPI00131881	IPI00131881	yes	no	2	0.0022526	123.76
IN(de)SSVTDVEEIIIGVR	1629.8574	IPI00623114	IPI00623114	yes	no	2	0.0017414	135.14
IN(de)QTFSGIMTMINMQFVIR	2243.1265	IPI0012001E	IPI0012001E	yes	yes	2	0.014235	66.809
IN(de)MTIPDAIVPTFSISNHSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3	2.2738E-15E	254.32
IN(de)KTVAIHTIDPEKIGQGGVQK	2345.3067	IPI00323624	IPI00323624	yes	no	2,3	1.9046E-05	146.13
IN(de)KTVAIHTIDPEK	1577.8777	IPI00323624	IPI00323624	yes	no	2,3	7.3718E-26	186.42
IN(de)ITISDVNDHTPR	1593.8111	IPI0022871E	IPI0022871E	yes	no	2	0.0065099	95.981
IN(de)ITEEEKIINRR	1626.9053	IPI00320204	IPI00320204	yes	yes	2,3	0.019054	110.08
IN(de)ITEEEKIINR	1470.8042	IPI00320204	IPI00320204	yes	yes	2	1.6709E-15	183.79
IN(de)ISEGEVAATVK	1329.714	IPI00458003	IPI00458003	yes	yes	2	6.02E-103	241.42
IN(de)GTDPIVAADSKR	1455.7682	IPI00119063	IPI00119063	yes	yes	2	1.7722E-47	207.4
IN(de)GTDPIVAADSK	1299.667	IPI00119063	IPI00119063	yes	yes	2	5.6642E-71	227.47
IN(de)ETHIFNGSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3	8.1919E-08	160.65
IN(de)ATHFYACGTHAFQPICAAIDAETFIIPTSFEEGKEK	4284.0296	IPI0012466E	IPI0012466E	yes	no	4	0.0009884	62.958
IMQDPIQQAEGIYCN(de)R	1934.8979	IPI0031454E	IPI0031454E	yes	yes	2	5.041E-26	188.9
IMNIEFYDCSCVSGSGFQKGN(de)HSAR	2863.2476	IPI0023031E	IPI0023031E	yes	no	3	0.0015314	85.737
IMNAPIYIAEWQNITKN(de)ISED	2618.3163	IPI00930882	IPI00930882	yes	no	3	0.031113	72.359
IMNAPIYIAEWQN(de)ITKNISED	2618.3163	IPI00930882	IPI00930882	yes	no	3	0.031113	72.359
IMNAPIYIAEWQN(de)ITK	1903.9866	IPI00930882	IPI00930882	yes	no	2	4.1601E-47	205.98
IMGINN(de)VTSQSWQPQTYQICIVDPVSASVK	3362.6639	IPI0055513C	IPI0055513C	yes	yes	3	0.016621	43.895
IMESHVN(de)GTFSAK	1417.666	IPI00177214	IPI00177214	yes	no	2	3.5369E-70	223.22
IKVSN(de)VSCEASVSK	1506.7712	IPI0013556C	IPI0013556C	yes	no	2	0.005375	116.78
IKPAFIKPYGTVAAN(de)SSFITDGASAMIIMSEDR	3601.816	IPI00115607	IPI00115607	yes	no	3,4	0.0023982	72.728
IKN(de)TTNQIAIK	1355.8136	IPI0098598E	IPI0098598E	yes	no	3	0.023251	103.43
IKIMESH(de)PNGTFSK	1658.845	IPI00177214	IPI00177214	yes	no	2	0.0021662	124.78
IKIDN(de)YSTQEIGR	1535.7944	IPI00122257	IPI00122257	yes	no	2,3	3.6179E-33	194.55
IKFIEAGIYEVPIIITDSGNPPK(de)SNISIIR	3296.8384	IPI00323134	IPI00323134	yes	no	3,4	9.451E-21	153.87
IKEQVVGIIAQNN(de)CSCSK	2176.0616	IPI00122592	IPI00122592	yes	yes	3	0.0009808	114.99
IYISAEDFSIDHSPN(de)STAGPSCSIIQEAFFR	3580.7256	IPI0011553C	IPI0011553C	yes	yes	3	0.0020021	58.722
IYISAEDFSIDHSPN(de)STAGPSCSIIQEAFR	3424.6245	IPI0011553C	IPI0011553C	yes	yes	3	0.0017638	59.893
IY(de)EGGDIPDFRKENSYSQVINWR	2898.4301	IPI0015331E	IPI0015331E	yes	yes	3	0.027743	66.536
IISYN(de)VSCSINEETQSVIEIFDPQHR	3077.4764	IPI0011929E	IPI0011929E	yes	no	3	1.0337E-10	109.65
IISVN(de)MTDKK	1147.6271	IPI00848693	IPI00848693	yes	yes	2	0.026563	106.4
IISQKN(de)SSQAR	1230.668	IPI00420867	IPI00420867	yes	no	2	0.015234	117.09
IISQAPSTPSPNMFTINN(de)ETGDIITVAAGIDREK	3599.8141	IPI00323134	IPI00323134	yes	no	3,4	3.8762E-10	99.753
IQYYGN(de)FSR	1259.6299	IPI00267963	IPI00267963	yes	yes	2	0.0023214	135.99
IQVVYIHSNN(de)ITK	1640.925	IPI00123194	IPI00123194	yes	yes	2	3.681E-47	203.11
IQTAEHN(de)ISGAER	1537.7849	IPI0040393E	IPI0040393E	yes	no	2	1.8419E-47	205.27
IQQQSN(de)QSSQFIHSVER	2128.0661	IPI00876541	IPI00876541	yes	no	2,3	9.8687E-37	199.01
IIPHIEKPIQN(de)FTICFR	2125.1507	IPI00309214	IPI00309214	yes	yes	2,3	0.00237	135.08
IINN(de)ITSIK	1014.6073	IPI0102780E	IPI0102780E	yes	no	2	0.011792	121.73
IINKFN(de)SSSSSIEEK	1681.8523	IPI00338561	IPI00338561	yes	yes	2	5.4415E-18	182.57
IINDYVSN(de)QTQGMK	1722.8611	IPI0013563E	IPI0013563E	yes	no	2	5.5395E-60	211.7
IIN(de)TTDVYIIPSINPDGFER	2276.1689	IPI00130573	IPI00130573	yes	yes	2	0.0095965	77.287
IIN(de)QTIRENIK	1340.7776	IPI00460063	IPI00460063	yes	no	2	3.4291E-14	182.28
IIN(de)QTIR	856.51305	IPI00460063	IPI00460063	yes	no	2	3.8944E-08	172.14
IIN(de)QTADMIIQIASK	1544.8232	IPI00126864	IPI00126864	yes	no	2	0	225.09
IIN(de)ITSPEATAK	1256.6976	IPI0011508E	IPI0011508E	yes	yes	2	0.011286	93.766
IIN(de)ITFIDITR	1317.7656	IPI0034356E	IPI0034356E	yes	no	2	0.0001399	150.49
IIN(de)HSIIHK	1186.7186	IPI00406603	IPI00406603	yes	yes	2	7.4601E-05	163.38
IIN(de)CTNIDCIQISCAVGR	2106.002	IPI00345112	IPI00345112	yes	yes	2	0.0003273	122.49
IIN(de)ATHQIGCQSSISGDTGVIVHVEKEEDIK	3376.6933	IPI00118674	IPI00118674	yes	yes	3,4	2.3557E-05	89.723
IIMNEGGHYN(de)ASSGK	1576.7304	IPI01026847	IPI01026847	yes	no	2	0.01215	87.519
IISPEEN(de)VTITCTAENQUIER	2429.2108	IPI0012137E	IPI0012137E	yes	no	2	5.5721E-06	129.51
IINN(de)FTSMDIYR	1484.7697	IPI00125182	IPI00125182	yes	no	2	0.0015387	118.87
IIKAPSHN(de)TTEPDPHSISPEIQAIISEVAQHVDVQNGR	4141.1192	IPI00165807	IPI00165807	yes	no	4	0.0013749	62.57
IIIGGIPVSGTFHN(de)FSGCISNVFVQR	2818.4589	IPI00116913	IPI00116913	yes	no	3	2.2429E-06	95.48
IIIGGDEDAIRPQMQUIIDFETAIAN(de)ITIPQEK	3623.8505	IPI0039684C	IPI0039684C	yes	no	3	4.2211E-20	145.33
IIFAN(de)VSVR	1017.5971	IPI0017315E	IPI0017315E	yes	no	2	0.0024698	144.77
IIYNYN(de)STK	1243.6085	IPI0010994E	IPI0010994E	yes	no	2	0.0022734	136.5
IIYFDSTN(de)ASEGAQPPGKPYPPYSIAK	2876.4232	IPI00459432	IPI00459432	yes	yes	2,3	4.4098E-18	166.21
IIDIPDGYPQISCIKPEEN(de)ATIATYPEFGVIDIK	3932.0169	IPI00124221	IPI00124221	yes	no	3,4	0.0018683	69.492
IISPNEENM(de)TEIISMR	1946.9441	IPI0032257E	IPI0032257E	yes	no	2,3	6.8635E-06	158.98
IASN(de)ITETMR	1247.6544	IPI0013260C	IPI0013260C	yes	no	2	2.1132E-117	253.76
IAN(de)ISYTIQIDGHR	1712.921	IPI00894972	IPI00894972	yes	no	2	0.019801	78.285
IIAENNEIISNIRDSVIN(de)ISESVEDGPR	3095.5735	IPI00114044	IPI00114044	yes	yes	3,4	4.3077E-13	133.47
IHYIYQNNFITEIPIESFQN(de)ATGIR	3093.5924	IPI00122293	IPI00122293	yes	yes	3	6.3771E-13	138.09
IHVAGPEN(de)DSHVAIHK	1769.9424	IPI00850413	IPI00850413	yes	yes	2,3	0.0004659	147.1
IHVAGGTHSVNQTVN(de)K	1660.8645	IPI0046942E	IPI0046942E	yes	no	2	0.0060005	95.57
IHVAGGTHSVN(de)QTVNK	1660.8645	IPI0046942E	IPI0046942E	yes	no	2	0.0060005	95.57

IHRIN(de)ASIADIQSK	1564.8685	IPI00116913	IPI00116913	yes	no	2,3	7.4079E-08	162.37
IHN(de)GSEEIAQYK	1458.7103	IPI00380296	IPI00380296	yes	no		2 0.0015976	130.24
IHKDN(de)TTCYEFKK	1682.8086	IPI00119063	IPI00119063	yes	yes		2 0.0032224	143.42
IHIIPSMNPDGYEVAQAQGN(de)MSGYIVGR	3056.4848	IPI0012826C	IPI0012826C	yes	yes		3 1.2597E-50	199.75
IHIGNYN(de)GTAGDAIR	1570.7852	IPI00310797	IPI00310797	yes	yes		2 0.0021258	111.64
IHHWSSPKPICSIVN(de)SSIVVK	2387.2784	IPI00118011	IPI00118011	yes	yes	2,3	2.9013E-05	113.47
IGYDPYANPPNYGNPDPIVIN(de)NTHR	2810.3412	IPI0031643C	IPI0031643C	yes	no		3 1.5131E-09	124.4
IGVTN(de)ASIVIFRPGSVR	1785.0261	IPI0065267E	IPI0065267E	yes	yes		3 0.024891	90.759
IGVQMHPGQEIHN(de)FTITGR	2134.0742	IPI0011929E	IPI0011929E	yes	no	2,3	0.0002031	122.49
IGPGEPIEHCN(de)VSGAIPPPGR	2242.178	IPI0032134E	IPI0032134E	yes	no	2,3	9.4523E-06	119.27
IGNFSEIATHN(de)QTFIK	1818.9264	IPI00855103	IPI00855103	yes	no		2 0.0023996	112.34
IGN(de)WTGEWPETEIVANIWMK	2373.1464	IPI00322497	IPI00322497	yes	yes	2,3	3.9359E-95	231.06
IGN(de)VTTWISSNPPVTFAAIYWEEDVSGHK	3401.6568	IPI00225072	IPI00225072	yes	no		3 1.9522E-12	105.63
IGN(de)FTIAYSAPKPETADNQR	2095.0334	IPI0022919E	IPI0022919E	yes	no	2,3	0.0008746	109.07
IGN(de)FSEIATHNQTFIK	1818.9264	IPI00855103	IPI00855103	yes	no		2 0.0023996	112.34
IGISFNSITVMEN(de)GSIANVPHIREIHIDNNKIIR	3814.0312	IPI0012319E	IPI0012319E	yes	yes		4 0.044284	33.487
IGISFNSITVMEN(de)GSIANVPHIR	2468.2846	IPI0012319E	IPI0012319E	yes	yes	2,3	7.1552E-69	216.17
IGHWIPAAPGRIEKIEGIIAN(de)VSR	2596.4602	IPI0011551E	IPI0011551E	yes	no		3 0.014442	73.783
IGHTN(de)ASIMIFEVK	1558.8177	IPI00858152	IPI00858152	yes	yes		2 0.0010054	144.68
IGGWN(de)ITGPWAK	1298.6772	IPI0039684C	IPI0039684C	yes	no		2 0.0026628	134.56
IGEMWNN(de)ISDNEKQPYVTK	2265.0736	IPI0022887E	IPI0022887E	yes	no		3 0.020846	82.663
IGDVEVNAGQN(de)ATFQCIATGR	2220.0593	IPI0012304C	IPI0012304C	yes	no		2 7.472E-40	201.27
IGAINSTISN(de)ESKEAFIDWAR	2321.1652	IPI00187353	IPI00187353	yes	yes	2,3	3.5485E-05	117.26
IGAINSTISN(de)ESK	1332.6885	IPI00187353	IPI00187353	yes	yes		2 5.3424E-06	156.6
IGAIN(de)STISNESKEAFIDWAR	2321.1652	IPI00187353	IPI00187353	yes	yes	2,3	3.5485E-05	117.26
IGAIN(de)STISNESK	1332.6885	IPI00187353	IPI00187353	yes	yes		2 5.3424E-06	156.6
IGAIN(de)NSIIIEDR	1539.8621	IPI0011551E	IPI0011551E	yes	no		2 1.3149E-26	189.09
IGACN(de)DTIK	990.48043	IPI00136642	IPI00136642	yes	yes		2 1.1512E-35	205.83
IFNIDSGN(de)GSIFTSK	1598.794	IPI00123942	IPI00123942	yes	yes		2 0.013275	88.552
IFIFN(de)QTGIEAKK	1507.8399	IPI00378224	IPI00378224	yes	yes		2 0.0016137	127.71
IFIFN(de)QTGIEAK	1379.7449	IPI00378224	IPI00378224	yes	yes		2 1.4929E-72	214
IESAMN(de)YTDFQRPICIPSKGDR	2597.2366	IPI0041628E	IPI0041628E	yes	yes		3 2.6256E-05	140.28
IEN(de)ITTGTYYIHAQK	1688.8733	IPI0022242E	IPI0022242E	yes	yes		2 0.031319	70.98
IEN(de)ISSTESGYTATITR	1841.9007	IPI0011196C	IPI0011196C	yes	no		2 2.4044E-202	276.4
IEKIEGIIAN(de)VSR	1440.83	IPI0011551E	IPI0011551E	yes	no		2 0.0090138	129.38
IEIVPIIYDN(de)DSIFVQTDK	2221.1518	IPI00405543	IPI00405543	yes	yes	2,3	4.7867E-62	216.35
IEGITN(de)ETYR	1194.5881	IPI0011929E	IPI0011929E	yes	no		2 5.8108E-27	196.11
IEGIIAN(de)VSR	1070.6084	IPI0011551E	IPI0011551E	yes	no		2 0.0064049	119.74
IEDRFN(de)STIGPSEEKKNWPGGPR	2799.3212	IPI0011551E	IPI0011551E	yes	no		3 8.2536E-09	123.55
IEDRFN(de)STIGPSEEK	1977.928	IPI0011551E	IPI0011551E	yes	no	2,3	0.0027942	140.89
IEDGFHPDAVAWAN(de)ITNAIR	2209.0916	IPI0016573C	IPI0016573C	yes	no	2,3	1.785E-28	187.47
IEAYFSIEGFPAEQN(de)ASNR	2142.0018	IPI0011431E	IPI0011431E	yes	yes	2,3	3.03E-19	182.15
IEAVIPAEFFEVSSSQN(de)GSYHHR	2829.4086	IPI0034215E	IPI0034215E	yes	no		4 1.2439E-08	112.74
IDWIGN(de)CSGINDDSYGYR	2103.8956	IPI0012155C	IPI0012155C	yes	yes		2 5.0965E-19	182.76
IDVSQN(de)VSSDTDQSCSTK	2098.8961	IPI0012076E	IPI0012076E	yes	no		2 2.5852E-112	238.8
IDVNSWIEN(de)FTK	1464.7249	IPI00626793	IPI00626793	yes	no		2 2.7297E-22	190.37
IDSFN(de)DSTFMIVYTPITPTTQR	2546.2363	IPI0032257E	IPI0032257E	yes	no	2,3	1.5635E-06	127.49
IDRNPSPEIPQVGN(de)ISIK	2091.096	IPI0030899C	IPI0030899C	yes	yes	2,3	0.0004277	149.44
IDPPCTN(de)TTAPSNIINPYVR	2406.1274	IPI0065853E	IPI0065853E	yes	no	2,3	6.8836E-16	177
IDNYS(de)TQEIGR	1294.6153	IPI00122257	IPI00122257	yes	no		2 1.2812E-07	166.7
IDITDFEKN(de)SSFAQYQSFK	2267.0746	IPI00121312	IPI00121312	yes	yes		3 5.9505E-13	176.28
IDIPVNTSIPNVTEIKEN(de)MTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.8338E-13	111.3
IDIPVNTSIPN(de)VTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.8338E-13	111.3
IDIPVNTSIPN(de)VTEIK	1751.9669	IPI00466371	IPI01026704	no	no		2 5.7386E-26	186.77
IDIPVN(de)TSIPNVTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.8338E-13	111.3
IDIPVN(de)TSIPNVTEIK	1751.9669	IPI00466371	IPI01026704	no	no		2 5.7386E-26	186.77
IDGATVDTHHIPVN(de)VTIR	1957.0381	IPI00751912	IPI00751912	yes	yes	2,3	0.0062823	91.076
IDFIVINE(de)TR	1218.6608	IPI00125813	IPI00125813	yes	no		2 0.0020625	138.75
IDETDCIGN(de)WTWQEGSQQTIK	2508.1227	IPI00122973	IPI00122973	yes	no	2,3	1.0154E-11E	239.75
IDCYPDEHGASEAN(de)CSAR	2050.8109	IPI00848693	IPI00848693	yes	yes	2,3	0.0002831	136.39
IDC(de)RHENNTKDNSIQHEFSITR	2713.2627	IPI00109727	IPI00109727	yes	yes		3 0.01632	79.676
IDAYNEAAVSIIN(de)SSTR	1822.9061	IPI0038029E	IPI0038029E	yes	yes		2 0.0006869	137.69
IDAPTNIQFVN(de)ETDRTVIVTWTPPR	2882.4927	IPI0011353E	IPI0011353E	yes	no	3,4	1.1569E-08	120.71
IDAPTNIQFVN(de)ETDR	1731.8428	IPI0011353E	IPI0011353E	yes	no		2 8.4463E-13C	250.19
ICQN(de)ISKK	989.5328	IPI00126184	IPI00126184	yes	yes		2 0.042348	115.7
ICQN(de)ISK	861.43784	IPI00126184	IPI00126184	yes	yes		2 3.0671E-05	161.11
ICN(de)ECSDGSFHISK	1652.6923	IPI0051536C	IPI0051536C	yes	no		2 0.0005351	124.16
ICHTHGWN(de)ETSEIMPPGAVFSCIYR	2961.336	IPI0012239E	IPI0012239E	yes	no		3 0.0004494	85.062
ICEGDRFCIIDVMSTGSSVGN(de)ATR	2731.2364	IPI0074965E	IPI0074965E	yes	no		3 1.0453E-24	190.88
IAVTN(de)TTMTGTVIK	1448.7909	IPI00108041	IPI00108041	yes	yes		2 1.2506E-08	165.49
IASPPSQGEVPPGPIPEAVIAIYN(de)STR	2759.4494	IPI00114457	IPI00114457	yes	yes		3 0.0004043	80.83
IASAVQKN(de)ATSTK	1317.7252	IPI0102780E	IPI0102780E	yes	no		2 0.007833	136.6
IAQEGGAAAIIAN(de)NSVIIIPSSR	2264.2488	IPI0012177E	IPI0012177E	yes	yes		3 0.012189	63.225
IAPASN(de)VSHTVVIRPIK	1801.0574	IPI0046718C	IPI0046718C	yes	yes		2 1.1171E-25	186.72
IAPASN(de)VSHTVVIR	1462.8256	IPI0046718C	IPI0046718C	yes	yes		2 0.0020734	113.4
IAN(de)FSQSCTIYSGDDIVEAIPKPCPGCPR	3251.505	IPI0011495E	IPI0011495E	yes	no	3,4	6.7938E-24	172.24
IAN(de)ETGGHSGPR	1251.5956	IPI0030923C	IPI0030923C	yes	no		2 0.0012787	117.08
IAMCQNIGYN(de)VTK	1510.7272	IPI00117094	IPI00117094	yes	yes		2 2.0179E-18	178.15
IAITPAHIIFIADN(de)HTEPAAHFR	2554.3445	IPI00230324	IPI00230324	yes	no		4 0.02217	56.424
IAISFPN(de)ITSDGYPIYPTGWSSSDNVNCRPR	3582.7202	IPI00466371	IPI01026704	no	no		3 2.7639E-19	120.42
IAIN(de)ITMYIK	1178.6733	IPI0013458E	IPI0013458E	yes	yes		2 0.028473	92.611
IAGGENN(de)CSGRVEIK	1602.7784	IPI0076010E	IPI0076010E	yes	no		2 0.0050861	132.31
IAGGEN(de)NCSGRVEIK	1602.7784	IPI0076010E	IPI0076010E	yes	no		2 0.0050861	132.31
IACIN(de)GTVIR	1115.6121	IPI0013480E	IPI0013480E	yes	no		2 8.8316E-05	162.38
I(de)VQAQYWHDPIKESVYRNYISIFIADINQER	3694.8532	IPI0033131E	IPI0033131E	yes	no	3,4	1.8468E-07	94.019
I(de)VYIEHNIKNSTKEEIIAAIEK	2796.5273	IPI0092832C	IPI0092832C	yes	no	2,3,4	2.876E-187	264.92

I(de)AVISGCKNTTSAAMVHCIR	2188.0915	IPI00131216	IPI00131216	yes	yes	2,3	1.9036E-13	171.71
HYPGWVSMANAGKDTN(de)GSQFFITTVK	2912.3916	IPI00135686	IPI00135686	yes	yes		3 2.4669E-13	125.31
HYAN(de)ITNGMYR	1338.6139	IPI00224073	IPI00224073	yes	no		2 0.0046693	114.83
HVYIGDKNAIN(de)ITFHAQNIGEGGAYEAEIR	3299.6323	IPI00115976	IPI00115976	yes	yes		3 7.9991E-20	120.54
HVVIN(de)GSSFGADGFPYVQVIK	2233.1532	IPI00742377	IPI00742377	yes	no		3 1.0373E-05	118.24
HVTDMN(de)STIHIIR	1535.7878	IPI00223446	IPI00223446	yes	yes	2,3	0.0052052	106.26
HVEDKFN(de)ETTQR	1502.7114	IPI00130654	IPI00130654	yes	no		2 0.0031653	141.58
HVCPVENWSYN(de)ESCSPPAEQGGPK	2843.1915	IPI00128269	IPI00128269	yes	yes		3 1.6244E-08	110.4
HVCPVEN(de)WSYNESCSPPAEQGGPK	2843.1915	IPI00128269	IPI00128269	yes	yes		3 1.6244E-08	110.4
HTDDITSIN(de)NTIVNIR	1824.933	IPI00129304	IPI00129304	yes	yes	2,3	3.4505E-08	166.48
HSVPVFCHPSFYN(de)DTDFIGEEIDIVDK	3278.523	IPI00416285	IPI00416285	yes	yes		3 0.003711	59.55
HSVIWNAMIHQIN(de)MTIK	2132.1023	IPI00111794	IPI00111794	yes	no	2,3	0.0003847	115.31
HSQQPIITYEKYN(de)VTDTPK	2261.1328	IPI00322418	IPI00322418	yes	yes		2 1.2912E-07	161.95
HSIEHFNN(de)NTDHSHTIR	2318.0941	IPI00114958	IPI00114958	yes	no	2,3,4	1.055E-49	211.06
HPGNFSSISCDYFAVN(de)QSR	2184.9647	IPI00115976	IPI00115976	yes	yes	2,3	1.737E-12	169.49
HPGN(de)FSSISCDYFAVNQSR	2184.9647	IPI00115976	IPI00115976	yes	yes	2,3	1.737E-12	169.49
HNN(de)DTQHIWESDSNEFSVIADPR	2710.2008	IPI00129526	IPI00129526	yes	no	2,3,4	7.5675E-102	235.68
HN(de)QSCEWCQTIAVR	1787.7832	IPI00330843	IPI00330843	yes	yes		2 0.0016245	115.8
HN(de)ITITQGK	1010.5509	IPI00128358	IPI00128358	yes	no		2 0.0001105	148.56
HIVFWN(de)SSNPK	1327.6673	IPI00130752	IPI00130752	yes	no		2 0.0054799	111.63
HISN(de)ATSATHEHIEGPATNDIK	2342.1251	IPI00461384	IPI00461384	yes	yes		3 0.028466	56.327
HISFGEDYPGIVNPIDHTN(de)VTAPQASMMFQYFVK	3852.828	IPI00132454	IPI00132454	yes	no	3,4	2.8403E-26	120.15
HIN(de)ITTSVAGGFR	1484.81	IPI00850413	IPI00850413	yes	yes	2,3	0.0008445	137.8
HIN(de)ASNPSEPATIIFTAAR	2009.033	IPI00421157	IPI00421157	yes	yes	2,3	5.3415E-133	250.94
HIIEN(de)ATASVSEAERK	1753.8959	IPI0039684C	IPI0039684C	yes	no	2,3	1.3957E-60	218.12
HIIEN(de)ATASVSEAER	1625.8009	IPI0039684C	IPI0039684C	yes	no	2,3	8.1305E-36	197.49
HHAAYVNNIN(de)ATEEKYHEAIAK	2522.2302	IPI00109109	IPI00109109	yes	yes		3 1.72E-05	131.45
HGFYCYIIGSTISTFTDAN(de)HTCTNEK	3036.3382	IPI00126186	IPI00126186	yes	yes		3 1.0552E-13	133.74
HFKGQTQN(de)YSTIIIEASER	2350.1553	IPI00124666	IPI00124666	yes	no		3 0.000107	144.68
HFFN(de)VSDEIAIVTIVK	1830.988	IPI00466371	IPI01026704	no	no		2 0.0086094	86.367
HF(de)IIDSKSNVTRPSEFNWIWIPIPIK	3331.7758	IPI00319509	IPI00319509	yes	no		3 0.0003995	84.181
HEN(de)NTKDNSIQHEFSITR	2169.0199	IPI00109727	IPI00109727	yes	yes	2,3	1.2884E-47	205.18
HEEGHMINC(de)TCFGQGR	1931.7825	IPI00113539	IPI00113539	yes	no	2,3	0.0011967	119.96
HDPN(de)MTCDYVIK	1491.6486	IPI00119299	IPI00119299	yes	no		2 0.028819	81.565
HAN(de)WTITPIK	1179.64	IPI00317356	IPI00317356	yes	yes		2 0.014806	106.62
HAN(de)ETSIGITWR	1383.6895	IPI00229935	IPI00229935	yes	yes		2 0.013619	90.614
HAEISFVITDGVVTGN(de)DSIEESVHSMR	2976.3924	IPI00621027	IPI00621027	yes	yes		3 2.0426E-13	139.69
GYN(de)SSQDIPSIVIDFVK	1880.952	IPI00124666	IPI00124666	yes	yes		2 1.3539E-47	206.62
GYITSFEMFN(de)STFK	1670.765	IPI00262024	IPI00262024	yes	no		2 2.5446E-197	271.56
GYIITINFTKN(de)TTR	1640.8886	IPI00469218	IPI00469218	yes	yes		2 7.9684E-109	239.61
GYIITIN(de)FTKNTR	1640.8886	IPI00469218	IPI00469218	yes	yes		2 7.9684E-109	239.61
GYIITIN(de)FTK	1168.6492	IPI00469218	IPI00469218	yes	yes		2 9.2133E-28	201.84
GWIN(de)GSIVGFYK	1339.6925	IPI00134585	IPI00134585	yes	no		2 1.1877E-40	206.36
GVTSVSQIFHSPDIAIRDITYVN(de)ASQSIYGSSPR	3551.7645	IPI00122977	IPI00122977	yes	no		3 1.6256E-05	83.788
GVTNDIISVQGNTGPSWIN(de)KTEK	2457.25	IPI00344686	IPI00344686	yes	yes	2,3	2.0453E-10	159.77
GVTHIN(de)ISGIKMPR	1521.845	IPI00119063	IPI00119063	yes	yes		2 0.024878	100.11
GVTHIN(de)ISGIK	1137.6506	IPI00119063	IPI00119063	yes	yes	1,2,3	0.0012092	138.24
GVSVSSGTGIPDMTGSVYN(de)K	1954.9306	IPI00457533	IPI00457533	yes	no		2 0.027208	64.275
GVSSSEN(de)FTSPVMEFWERR	2244.027	IPI00466652	IPI00466652	yes	no		3 0.0048856	95.067
GVSSSEN(de)FTSPVMEFWER	2087.9259	IPI00466652	IPI00466652	yes	no	2,3	1.253E-36	198.85
GVQIIVFPEDGIHGFN(de)FTR	2145.1007	IPI00321375	IPI00321375	yes	no	2,3	2.0703E-21	185.85
GVNVITVN(de)ATDADSK	1502.7577	IPI00623114	IPI00623114	yes	no		2 2.4445E-26	190.82
GVN(de)VTMPSPQGVPPISSTQIQIDPAIQEFQIVDISR	3860.9982	IPI0051536C	IPI0051536C	yes	no		3 0.0003895	72.37
GVIPGEDWTVFQSN(de)HSTYEPVIAK	2786.3915	IPI00404189	IPI00404189	yes	no		2 0.0002406	87.802
GVIMVGNETTYEDGHGARKN(de)ITDIVEGAK	3073.5139	IPI00649186	IPI00649186	yes	no		3 0.0014248	80.835
GVIMVGN(de)ETTYEDGHGARKNITDIVEGAK	3073.5139	IPI00649186	IPI00649186	yes	no		3 0.0014248	80.835
GVIMVGN(de)ETTYEDGHGAR	1904.8687	IPI00649186	IPI00649186	yes	no	2,3	0.0006603	117.18
GVFITNE(de)TGQPIIGK	1572.8512	IPI0011196C	IPI0011196C	yes	no		2 2.8014E-75	224.16
GVDSCHGDSGGAFQVFN(de)VTVPK	2445.1383	IPI00653675	IPI00653675	yes	no		3 0.0090145	63.225
GVAVTN(de)TSQIGFR	1348.7099	IPI00471089	IPI00471089	yes	no		2 1.0606E-09	166.62
GTPSHEIN(de)TTSSGAIEVIK	1954.9596	IPI00849185	IPI00849185	yes	no		2 0.0005739	120.11
GTFTDCAIANM(de)TQQIR	1825.8451	IPI00621027	IPI00621027	yes	no		2 1.7061E-106	199.58
GTDPSPSPAATPPAPGAEISYIN(de)HTFR	2950.4461	IPI00762091	IPI00762091	yes	yes		3 2.4756E-09	102.21
GTCEQGPSIVTPPKDIWN(de)VTGAK	2454.2213	IPI00652107	IPI00652107	yes	no		3 0.0015375	89.557
GTAGNAIMDGASQIVGEN(de)R	1859.8796	IPI00279079	IPI00279079	yes	yes	2,3	5.6375E-232	284.5
GSYIIAANGEDTDVDKITNSPQNQN(de)ITVPR	3358.6277	IPI00406603	IPI00406603	yes	yes		3 3.0726E-19	148.87
GSTQYIENIGFN(de)MSK	1687.7876	IPI00116105	IPI00116105	yes	yes		2 0.0013827	140.8
GSSVIIN(de)CSAYSESPNIEWK	2337.0947	IPI00129159	IPI00129159	yes	no		2 3.3639E-15	175.65
GSPGN(de)ASQGSIIHSPQIAIQADPR	2537.2735	IPI00114044	IPI00114044	yes	yes	2,3	6.4424E-09	116.43
GSNFN(de)ISKTDNIEECQK	1982.9004	IPI00113057	IPI00113057	yes	yes	2,3	0.0001228	155.57
GSNFN(de)ISK	865.42938	IPI00113057	IPI00113057	yes	yes		2 0.0038848	150.27
GSN(de)FTAICVIK	1208.6223	IPI00120155	IPI00120155	yes	yes		2 0.0026581	102.97
GSIQSANDISSQTQGFQHSMDN(de)ISAQIQTVR	3460.6641	IPI00330594	IPI00330594	yes	yes	3,4	7.1253E-20	135.34
GSIN(de)VSYNIGPGFTGSEYSR	2103.9861	IPI00113042	IPI00113042	yes	no		2 1.3979E-05	120.23
GSEVEDEDIEIFN(de)TSVQIRPPSTAPGPETAALFIER	3800.8381	IPI00381357	IPI00381357	yes	no	3,4	4.882E-27	132.78
GSAIPHPN(de)ATWEIK	1606.8104	IPI00119299	IPI00119299	yes	no		2 6.7403E-08	162.79
GRADECAIPYIGATCYDIFCN(de)R	2781.1768	IPI00115458	IPI00115458	yes	no		3 9.1688E-05	100.02
GQTQNYST(de)IIIEASER	1937.933	IPI00124666	IPI00124666	yes	no	2,3	9.6957E-61	215.51
GQTGIGFIYASGIVN(de)SSQAK	2054.0433	IPI00131143	IPI00131143	yes	no		2 4.3863E-51	205.78
GPDISN(de)CTSHWVNIQAQK	2053.964	IPI00876558	IPI00876558	yes	no		2 0.0004878	112.3
GPDGTEGISTVN(de)GSTDPSAVTDIR	2432.1303	IPI00469426	IPI00469426	yes	no	2,3	3.834E-09	145.81
GNYGWQAGN(de)HSAFWGMTIDEGIR	2566.1448	IPI00115458	IPI00115458	yes	no	2,3	7.4794E-09	132.14
GNYDFVEAMIVNN(de)HTSIDVER	2422.1223	IPI00403586	IPI00403586	yes	yes	2,3	6.4354E-06	148.01
GN(de)TTAIDKEIAR	1287.6783	IPI00108535	IPI00108535	no	no		2 9.0551E-07	160.18
GN(de)QSSQWIYEAMAK	1611.7351	IPI00137792	IPI00137792	yes	yes		2 0.0026227	112.96
GN(de)ITEYQCHQYITK	1753.8094	IPI00122399	IPI00122399	yes	no		2 4.8122E-27	192.46

GN(de)ISTEKFVEEIK	1492.7773	IPI00466371	IPI01026704	no	no		2	7.0714E-13	172.57
GN(de)HSIFGIEVATIGQGDCPSVNER	2653.2555	IPI00459432	IPI00459432	yes	yes		3	1.12E-09	125.31
GN(de)GSCVCHAGWQGIR	1657.7202	IPI00987265	IPI00987265	yes	no		2	0.0010029	130.24
GMNYN(de)SSVVK	1097.5175	IPI00416285	IPI00416285	yes	yes		2	0.015607	110.84
GKIYWTDGDNISMANMDG(de)SNHTIIFSGQK	3199.4703	IPI00119063	IPI00119063	yes	yes		3	8.31E-14	131.27
GKIYWTDG(de)DNISMANMDGSNHTIIFSGQK	3199.4703	IPI00119063	IPI00119063	yes	yes		3	8.31E-14	131.27
GIWKIPFSPENTREEDFYVN(de)ETSTVK	3085.5033	IPI00116105	IPI00116105	yes	yes		3	0.022183	60.464
GIVSGGVYNSHVGCIPYTIPPCEHHVN(de)GSRPPCTGEGDTPR	4430.0379	IPI00113517	IPI00113517	yes	yes		4	0.0025411	48.774
GISYQIIGN(de)HSK	1315.6884	IPI00623114	IPI00623114	yes	no		2	0.0001135	134.56
GINIT(de)EDTYKPR	1405.7201	IPI00119809	IPI00119809	yes	yes		2	8.178E-53	219.43
GIMVGN(de)GSVIGVVQAVDAETGK	2100.0885	IPI00342158	IPI00342158	yes	no	2,3		0	337.87
GIMIIIN(de)DTQHFSNNVKGEGQFYR	2893.4545	IPI00312711	IPI00312711	yes	no		3	0.000161	92.993
GIMIIIN(de)DTQHFSNNVK	1942.9935	IPI00312711	IPI00312711	yes	no	2,3		1.0472E-131	252.82
GIIN(de)ATISVAEINHPVTTYK	2140.1528	IPI00130573	IPI00130573	yes	yes	2,3		1.2491E-28	189.55
GIIGISN(de)ATYWHIPDTAYPGIYR	2690.3857	IPI00458077	IPI00458077	yes	yes		3	4.6181E-10	153.11
GIFPDGSHEISGN(de)TSITPDK	2070.9858	IPI00894972	IPI00894972	yes	no		2	0.0025636	87.49
GIAN(de)ISNFIR	1103.6087	IPI00129158	IPI00129158	no	no		2	0.0020419	146.11
GHVDPAN(de)DTFDIDPR	1667.754	IPI00453501	IPI00453501	yes	no	2,3		0.020655	77.527
GHTDRCDEAQAIQVWN(de)DTHPEVISQKPFDK	3520.643	IPI00108003	IPI00108003	yes	no		4	0.0034651	74.819
GHIIAQVATNPQGITGTGN(de)TTSEMDPSHRK	3230.6102	IPI00321375	IPI00321375	yes	no		3	1.7183E-19	122.34
GHIIAQVATNPQGITGTGN(de)TTSEMDPSHR	3102.5153	IPI00321375	IPI00321375	yes	no		3	3.69E-46	189.51
GHICN(de)QTQNIQSSK	1613.758	IPI00987886	IPI00987886	yes	yes		2	0.0003285	125.97
GHFYYN(de)ISDVR	1369.6415	IPI00135560	IPI00135560	yes	no		2	0.0050337	113.38
GHAIGISCQSEN(de)GTAPITYHIMK	2484.189	IPI00406901	IPI00406901	yes	no		3	1.4718E-08	146.78
GHAHIAIVNHDSYN(de)FSHR	2145.0253	IPI00133365	IPI00133365	yes	no	2,3		2.3277E-08	164.2
GGIN(de)ITAVTVTAENDHTVAFIGTSDGR	2715.3464	IPI00405742	IPI00405742	yes	no		3	0.0012932	70.699
GFTQIQTIIPQDVPCPGGSNAWDN(de)VTSFKDK	3532.7297	IPI00471273	IPI00471273	yes	no		3	3.0888E-05	88.541
GFQWVTGDN(de)HTSYSR	1753.7808	IPI00129423	IPI00129423	yes	yes		2	5.0925E-06	159.18
GFN(de)ATYHVR	1063.5199	IPI00411025	IPI00411025	yes	yes		2	0.014574	118.18
GFGVAFVGN(de)YTGSIPNEAAINTVR	2453.2339	IPI00165807	IPI00165807	yes	no		3	5.5728E-05	95.5
GFDTYFGYIIGSEDIYTHEACAPIESIN(de)GTR	3545.5722	IPI00652358	IPI00652358	yes	no		3	7.7033E-22	156.88
GENPSQYGITAFNHPIN(de)ITK	2200.0913	IPI00112614	IPI00112614	yes	yes		2	3.0599E-05	144.17
GEIQSEN(de)SSITISSNR	1807.8548	IPI00466371	IPI01026704	no	no	2,3		3.279E-258	289.32
GEIN(de)STIFSSRPK	1434.7467	IPI00460063	IPI00460063	yes	no		2	0.0013386	147.73
GECYYTN(de)GTQR	1347.5514	IPI00110910	IPI00110910	yes	no		2	0.0005585	144.1
GDTHTQIIEGIIQFN(de)ITQTSEADIHK	2795.3726	IPI00406302	IPI00406302	yes	no	3,4		1.0485E-84	221.14
GDSGGAIVFIDN(de)ETQR	1677.7958	IPI00467068	IPI00467068	yes	no		2	0.027657	71.08
GDPSIISVN(de)GTDFTFR	1724.837	IPI00463492	IPI00463492	yes	yes		2	4.4879E-05	152.94
GDGPFTVFPHADIIISN(de)MSQDEIAR	2715.2963	IPI00987265	IPI00987265	yes	no		3	5.9581E-09	117.38
GDEKENITA(de)EAIDISIK	1844.9367	IPI00124725	IPI00124725	yes	no	2,3		0.0009502	145.52
GCKDNA(de)TDSVPIR	1431.6776	IPI00119063	IPI00119063	yes	yes		2	3.0438E-13	175.29
GCADYCNQ(de)TITKR	1585.6977	IPI00987265	IPI00987265	yes	no		2	0.0010977	143.25
GAIQIPTVSFSHEESN(de)TTAIAEFGYIRK	3194.5884	IPI00224073	IPI00224073	yes	yes		3	0.0004819	80.786
GAIQIPTVSFSHEESN(de)TTAIAEFGYIR	3066.4934	IPI00224073	IPI00224073	yes	yes		3	4.4651E-14	128.29
GAIDIMIQVN(de)MTPGHSSAPPK	2163.0816	IPI00224073	IPI00224073	yes	yes	2,3		7.3449E-06	116.39
GAGEVSPAESHSSKPTN(de)ISAK	1965.9756	IPI00230718	IPI00230718	yes	no		3	0.023259	80.738
GAFVSKNPCN(de)ITREDYAPIVK	2378.2053	IPI00307966	IPI00307966	yes	yes	2,3		2.2232E-05	149.36
GAFVSKNPCN(de)ITR	1462.7351	IPI00307966	IPI00307966	yes	yes		2	0.027034	98.592
GAFISN(de)FTMTVNGMTFTSSIK	2253.081	IPI00970438	IPI00970438	yes	no		2	0.017047	71.756
GAFFPIKEDN(de)WSIPNR	1889.9424	IPI00135560	IPI00135560	yes	no		2	0.0051928	115.56
GAAAPSAPHWN(de)ETAEK	1635.7641	IPI00648288	IPI00648288	yes	no		2	0.0002776	126.16
FVPNSNMN(de)FTGQAYSGR	1888.8526	IPI00108535	IPI00108535	no	no	2,3		7.6966E-10	154.39
FVHVN(de)TSAIHK	1227.6976	IPI00153632	IPI00153632	yes	yes		2	0.0064223	108.35
FTFTSHTPGEHQICHSN(de)STK	2428.123	IPI00473680	IPI00473680	yes	no	2,3		6.5865E-15	174.02
FTFTSHTPGDHQICHSN(de)STR	2442.1135	IPI00153468	IPI00153468	yes	no	2,3		6.4857E-51	203.06
FTCN(de)QTTDVIHHSK	1775.8876	IPI00319509	IPI00319509	yes	yes	2,3		5.3099E-151	259.96
FTAPDTIFAN(de)GSVYPPNEGFCPCR	2716.205	IPI01008227	IPI01008227	yes	no	2,3		7.2406E-09	139.28
FSWNNITNSIDIANISADFQGRPVDDPTGAFAN(de)GSITFK	4200.0189	IPI00459432	IPI00459432	yes	yes	3,4		0.0011547	65.898
FSWNNITNSIDIAN(de)ISADFQGRPVDDPTGAFANGSITFK	4200.0189	IPI00459432	IPI00459432	yes	yes	3,4		0.0011547	65.898
FSWNN(de)ITNSIDIANISADFQGRPVDDPTGAFANGSITFK	4200.0189	IPI00459432	IPI00459432	yes	yes	3,4		0.0011547	65.898
FSVN(de)QTTIITHEK	1516.7886	IPI00848693	IPI00848693	yes	yes		2	2.0117E-09	164.64
FSTEIGYN(de)GTR	1243.5833	IPI00134013	IPI00134013	yes	yes		2	6.8173E-10	173.72
FSPPVVN(de)VTWIR	1413.7769	IPI00110808	IPI00110808	yes	no		2	0.013382	90.861
FSMSDYDIQDVIADVGIKDIFTN(de)QSDFADTTKDTPIITVIHK	4918.411	IPI00116105	IPI00116105	yes	yes		4	0.0022952	46.449
FSMSDYDIQDVIADVGIKDIFTN(de)QSDFADTTK	3699.7138	IPI00116105	IPI00116105	yes	no		3	6.504E-38	180.21
FSHN(de)GTCAAEGK	1277.5459	IPI00320675	IPI00320675	yes	yes		2	1.1512E-07	162.31
FSEIIVNN(de)ATEEIIVK	1817.9775	IPI00928320	IPI00928320	yes	no		2	0.0011823	118.21
FSEIATVHN(de)HSIPK	1578.8154	IPI00124697	IPI00124697	yes	no		2	0.0022549	112.42
FSDGIESN(de)R	1023.4621	IPI00131091	IPI00131091	yes	no		2	0.0054052	132.01
FSATEVPEKGAGEVSP(de)AEHSSKPTNISAK	2954.4621	IPI00230718	IPI00230718	yes	no	3,4		1.1763E-13	135.62
FQN(de)FSMATDQR	1343.5928	IPI00128178	IPI00128178	yes	no		2	1.656E-05	158.42
FQISPQIQFSPEEVIGMVIN(de)YSR	2681.3523	IPI00123342	IPI00123342	yes	no	2,3		5.7007E-55	203.71
FQIIN(de)FSSSEIK	1411.7347	IPI00856723	IPI00856723	yes	no		2	4.2563E-16	183.89
FPVPFQKENV(de)TATIVEIGR	2144.163	IPI00134691	IPI00134691	yes	yes	2,3		3.318E-05	157.57
FNSTE(de)YQVVTR	1342.6517	IPI00119063	IPI00119063	yes	no	2,3		5.1371E-05	152.4
FNGGGHIN(de)HTIFWTNISP	2139.065	IPI00109109	IPI00109109	yes	yes	2,3		0.0002592	118.55
FN(de)VSIIYGR	1067.5764	IPI00320675	IPI00320675	yes	yes		2	0.0024384	141.95
FN(de)ITETPEADIIHQFGNIIQSISQPEDQDQINIGNAMFIEK	4601.202	IPI00131830	IPI00131830	yes	no	3,5		6.8988E-05	56.231
FN(de)GSVSFFR	1059.5138	IPI00551169	IPI00551169	yes	no		2	0.0005422	159.83
FN(de)ETIHR	915.45626	IPI00471081	IPI00471081	yes	yes		2	0.027465	123.72
FN(de)DTEVIQR	1120.5513	IPI00321375	IPI00321375	yes	no		2	0.011233	108.47
FMGIPTKDDNIEHYKN(de)STVMAR	2566.2308	IPI00123925	IPI00123925	yes	no		3	0.0012483	94.057
FKDNTPNAN(de)ATER	1476.6957	IPI00125138	IPI00125138	yes	no		2	0.010645	110.38
FIWSEPQN(de)CSATK	1566.7137	IPI00118987	IPI00118987	yes	no		2	0.0011112	118.37
FIVTQVPVHGHIFN(de)NTR	2091.1378	IPI00553703	IPI00553703	yes	yes		3	0.024387	70.529
FITDVERN(de)ETAIYHVEAFK	2281.1379	IPI00466733	IPI00466733	yes	no		3	0.0003293	130.29



FIQSAEFFN(de)YTVR	1620.7936	IPI0012740€	IPI0012740€	yes	yes	2	7.5949E-26	192.39
FIQ(de)KHINASNPNSEPATIIFTAAR	2525.3391	IPI00421157	IPI00421157	yes	yes	3	0.021711	71.735
FINYN(de)QTVSR	1240.62	IPI0022693€	IPI0022693€	yes	no	2	4.7586E-62	224.58
FIN(de)ISSTGIR	1106.6084	IPI0013189€	IPI0013189€	yes	yes	2	0.008217	117.09
FIEYVTSECHFYN(de)GTQHVR	2386.0801	IPI0047458€	IPI0047458€	yes	no	3	6.5334E-05	150.76
FIEDKIRQFVDICSMN(de)VSFVISHR	3139.5947	IPI00309741	IPI00309741	yes	yes	3	0.011243	61.616
FIEAGIYEVPIITDSGNPPKSN(de)ISIIR	3055.6594	IPI00323134	IPI00323134	yes	no	2,3,4	3.083E-11	115.96
FHVNY(de)TQPIVAVK	1514.8245	IPI00123704	IPI00123704	yes	no	2	0.01654	86.944
FHVHQPVTQPFIVTN(de)TTVK	2320.2328	IPI00658311	IPI00658311	yes	no	2,3,4	3.9539E-11	242.1
FHSDINI(de)SESIIPAVIEK	2011.0626	IPI00831484	IPI00831484	yes	yes	2,3	0.0005078	145.48
FGYIIHTDN(de)R	1234.6095	IPI0047520€	IPI0047520€	yes	no	2	0.006447	119.68
FGTCSQICN(de)NTK	1428.6126	IPI0011906€	IPI0011906€	yes	yes	2	4.1508E-66	225.33
FGN(de)ETFIHIDNGR	1631.8056	IPI0017035€	IPI0017035€	yes	yes	2	0.0018109	118.13
FGHSPIIN(de)ITGGISHASDVVIYHQHK	2826.4565	IPI0011906€	IPI0011906€	yes	yes	3,4,5	1.6582E-06	96.848
FGEFGN(de)YSIIVQHASSGANK	2125.0229	IPI0031748€	IPI0031748€	yes	no	2,3	9.29E-21	183.06
FFQAFTKN(de)GSGATIPGAGANVQTIR	2552.3136	IPI00223231	IPI00223231	yes	no	3	0.028732	60.635
FFN(de)FSWR	1002.4712	IPI0039684€	IPI0039684€	yes	no	2	0.028311	130.27
FFN(de)DSIVDPVDSEWFGFYR	2339.0535	IPI0033131€	IPI0033131€	yes	no	2	6.8032E-05	150.69
FDGEPDQSIN(de)ITWFIK	2068.9564	IPI0062526€	IPI0062526€	yes	no	2	0.0048333	94.882
FDEFFSQGCAPGYEKN(de)STICDICGPIK	3252.4566	IPI0013978€	IPI0013978€	yes	no	2,3,4	7.0446E-30	178.17
FDAAGTSVHGGVPQN(de)GSICAHIPMIK	2663.2948	IPI0031553€	IPI0031553€	yes	yes	3	8.0727E-15	156.29
FCNIVPTEHCFIGN(de)GTEYR	2313.0307	IPI00227857	IPI00227857	yes	yes	2,3	0.0008141	102.98
FCIIDVMSTGSSSVGN(de)ATR	2000.9296	IPI0074965€	IPI0074965€	yes	no	2	1.1302E-93	231.86
FAVESIVPSSISIMHSPPDAQN(de)MSEVSISPMEISTFR	4019.9319	IPI00114044	IPI00114044	yes	yes	3,4	0.0001549	62.833
FAQPQWHIHINGTFSN(de)ETEPDTEPCVDGWVYDR	4057.833	IPI0022634€	IPI0022634€	yes	no	3	2.315E-21	115.66
FAQPQWHIHINGTFSN(de)ETEPDTEPCVDGWVYDR	4057.833	IPI0022634€	IPI0022634€	yes	no	3	2.315E-21	115.66
FAPPEAPEPWSG(de)VRDGTSQAICPQNVTMNMEGIK	3810.7804	IPI00320204	IPI00320204	yes	yes	4	0.0013373	58.47
FAIKNEDSNFTIINNHDNTAN(de)ITVK	2832.4042	IPI0013818€	IPI0013818€	yes	yes	3	1.976E-08	137.72
FAIKNEDSN(de)FTIINNHDNTANITVK	2832.4042	IPI0013818€	IPI0013818€	yes	yes	3	1.976E-08	137.72
FAIKDYR(de)PSAGNNSIYQDVTVFK	2745.4126	IPI0032246€	IPI0032246€	yes	no	3	0.01262	74.776
FAEIN(de)GSAICSYNIKPSEYITTSK	2692.3054	IPI00421237	IPI00421237	yes	no	3	0.0004542	91.637
F(de)IFKNQTIHVIYGPR	2074.1364	IPI0012297€	IPI0012297€	yes	no	2,3,4	6.6779E-36	200.69
F(de)APPQPAEPWSFVNKNTSYPPMCSQDAVGGQVISEIFTNR	4453.1147	IPI0038728€	IPI0038728€	yes	yes	4	0.0067457	47.156
EYHTIDDHCVYN(de)STHIGIQR	2457.1132	IPI0012785€	IPI0012785€	yes	yes	3	0.0063366	80.638
EYEGAVYPDND(de)TTDFQR	1903.8224	IPI00605187	IPI00605187	yes	no	2	0.0003883	130.27
EWN(de)GTYHCIFR	1481.651	IPI00876541	IPI00876541	yes	no	2	0.001132	127.42
EVNSQIDNNGCSTQEVN(de)ITEIQSKK	2834.3352	IPI0012322€	IPI0012322€	yes	yes	3	3.9464E-08	109.22
EVNSQIDNNGCSTQEVN(de)ITEIQSK	2706.2403	IPI0012322€	IPI0012322€	yes	yes	2,3	9.3961E-10	234.36
EVNSKIDNNGCSTQEVN(de)ITEIQSK	2706.2767	IPI0027126€	IPI0027126€	yes	yes	2	0.0010561	79.69
EVN(de)KTCEAIFK	1450.749	IPI0011511€	IPI0011511€	yes	yes	2	4.5989E-10	169.52
EVN(de)ITVIDRK	1185.6717	IPI0011138€	IPI0011138€	yes	no	2	0.022222	105.46
EVMN(de)FTAENIYK	1457.6861	IPI0017000€	IPI0017000€	yes	no	2	0.022516	85.522
EVHFFVN(de)ASDVDSVK	1691.8155	IPI0031004€	IPI0031004€	yes	yes	2	2.9037E-05	153.79
ETYIETN(de)YTIK	1373.6715	IPI0012015€	IPI0012015€	yes	yes	2	0.024778	84.507
ETIVTIFDN(de)R	1206.6245	IPI0012723€	IPI0012723€	yes	no	2	0.0003881	159.09
ETIEQISEFN(de)DSIK	1651.7941	IPI0017315€	IPI0017315€	yes	no	2	0.0047709	102.62
ESSEHPWK(de)WTDNTEYNNTIPIRGEER	3187.4595	IPI0027643€	IPI0027643€	yes	yes	3	1.0887E-29	182.15
ESQTIGDQCVYNSTHIGFQREN(de)GTFSK	3102.4101	IPI0011813€	IPI0011813€	yes	yes	3	2.7894E-13	125.45
ESQTIGDQCVYN(de)STHIGFQRENGTFSK	3102.4101	IPI0011813€	IPI0011813€	yes	yes	3	2.7894E-13	125.45
ESQTIGDQCVYN(de)STHIGFQR	2339.0601	IPI0011813€	IPI0011813€	yes	yes	2	2.9893E-15	254.82
ESQIN(de)ITVMAKPTNWIEGTR	2287.1631	IPI0031140€	IPI0031140€	yes	yes	3	0.0060263	93.226
ESNPITAQTT(de)KIDAPTNIQFVNETDR	3030.4894	IPI0011353€	IPI0011353€	yes	no	3	3.7602E-13	123.64
ESN(de)STSITQAAIIEK	1590.8101	IPI0011551€	IPI0011551€	yes	no	2	1.2454E-08	167.71
ESIIPVTIQCND(de)ITSSSHTIMYSYWTR	3086.4841	IPI00757771	IPI00757771	yes	no	3	0.025235	50.752
ESGIQN(de)VSTCR	1249.5721	IPI01008227	IPI01008227	yes	no	2	8.2256E-07	164.9
ERVEN(de)TSQPGEQVVTIQNIMPATVYIFK	3222.6053	IPI0012915€	IPI0012915€	yes	no	3	1.9641E-08	105.32
ERTEVIIQGTVSPN(de)ASAPDAVWEDYEFK	3150.5146	IPI00405437	IPI00405437	yes	no	3	0.011368	69.248
EREDVQAIN(de)ISVPYGPPIEDFQR	2671.3242	IPI01023131	IPI01023131	yes	no	3	6.3545E-08	144.57
EQYIHEN(de)YSR	1337.6	IPI0012740€	IPI0012740€	yes	no	2	1.6602E-48	214.82
EQSFQGSN(de)MTIFYR	1706.7723	IPI00453571	IPI00453571	yes	no	2	0.0071377	98.582
EQNYTCHVYHEGL(de)PEPITIR	2455.159	IPI01026927	IPI01026927	yes	no	2,3	1.6939E-78	224.4
EQN(de)YTCHVHHK	1451.6364	IPI00850057	IPI00850057	yes	no	2	0.0014005	120.06
EQIN(de)ISIDHR	1223.6258	IPI00127407	IPI00127407	yes	no	2	8.3588E-77	230.41
EQGPSIVTPPKDIWN(de)VTGAK	2136.1215	IPI0092982€	IPI0092982€	yes	yes	2	7.4517E-05	113.86
EQESMMN(de)ITIHIVK	1671.8324	IPI0067579€	IPI0067579€	yes	no	2	0.0086373	89.231
ENYAEIIDDGFIKN(de)ITAQICIDKK	2810.416	IPI0033988€	IPI0033988€	yes	no	3	1.2051E-32	187.73
ENS(de)SYQVINWR	1394.6579	IPI0015331€	IPI0015331€	yes	yes	2	3.419E-07	167.2
ENQN(de)HSYSIK	1218.5629	IPI0012024€	IPI0012024€	yes	no	2	0.015335	104.82
ENPGFDFSGAEISGN(de)YTK	1931.8537	IPI00461281	IPI00461281	yes	no	2	0.010206	82.265
ENPEQSRVT(de)INNWWVANKTEGR	2441.2047	IPI0013664€	IPI0013664€	yes	yes	3	0.009639	85.51
ENPEQ(de)SRVTINNWWVANKTEGR	2441.2047	IPI0013664€	IPI0013664€	yes	yes	3	0.009639	85.51
ENN(de)VTEIITGIFQDPNVQK	2271.1747	IPI00127461	IPI00127461	yes	yes	3	0.017685	61.962
ENIIDISNAN(de)R	1257.6313	IPI0096896€	IPI0100832€	no	no	2	2.2841E-06	160.22
ENIFIGQAGGFQDREEEYAEQVTEAEVATEDAN(de)STDSII	4945.269	IPI00378224	IPI00378224	yes	yes	4	1.075E-06	78.312
ENGVD(de)AVHPGYGFISER	1845.8646	IPI00943457	IPI00943457	yes	no	2	0.025728	64.507
ENGTFSKYEGGVETFAHIIIVIR(de)K	2594.3493	IPI0011813€	IPI0011813€	yes	yes	3	0.014426	76.704
EN(de)VSDPSITITFR	1534.7627	IPI0046921€	IPI0046921€	yes	yes	2	2.0183E-60	214.47
EN(de)NSPAIHIGTISATDSGSDSNAHITYSIR	3127.4806	IPI00469537	IPI00469537	yes	yes	3	0.0005953	67.217
EN(de)ISDPTSPIR	1227.6095	IPI0013692€	IPI0013692€	yes	no	2	0.0016699	124.21
EN(de)GTFSKYEGGVETFAHIIIVIR	2466.2543	IPI0011813€	IPI0011813€	yes	yes	2,3	5.5999E-97	233.63
EMIHN(de)ATFCIVPR	1586.7698	IPI0012553€	IPI0012553€	yes	no	2	0.018275	113.99
EMGNT(de)VMDIIRNYTANATSSREEAWDYVQAQVK	3789.7727	IPI0010809€	IPI0010809€	yes	no	3,4	0.0076039	57.339
EKVEN(de)GSETGPIPEIQPIIEGEVK	2688.3858	IPI0013601€	IPI0013601€	yes	yes	2,3	4.5406E-09	150.14
EKSCVAITDAFPQN(de)MSR	1952.9084	IPI0040574€	IPI0040574€	yes	no	3	0.028338	91.657
EKEDRPFHQAV(de)VNDTQAFWHNK	2695.2891	IPI00406901	IPI00406901	yes	no	3	1.5505E-05	120.11
EKDVIWFRPTIINDTGN(de)YTCMIR	2841.3942	IPI0092988€	IPI0092988€	yes	no	3	3.7608E-09	151.96

EKDVIWFRPTIIN(de)DTGNYTCMIR	2841.3942	IPI0092988E	IPI0092988E	yes	no		3	3.7608E-09	151.96
EIVHQRN(de)TSNIFFSPVSIATAFAMISIGSK	3195.6274	IPI00406302	IPI00406302	yes	no		3	1.2043E-21	156.7
EITGIRN(de)ISSQEGSTDVVAR	2131.0869	IPI0067739E	IPI0067739E	yes	no	2,3		2.9021E-63	218.14
EITDTGKNAVN(de)CTYKNEDDCVVR	2700.2119	IPI00266264	IPI00266264	yes	yes		3	7.2603E-08	140.35
EIN(de)ISICPVSQTSE	1731.8461	IPI0038130E	IPI0038130E	yes	yes		2	5.3663E-11C	240.92
EIKGDGPFTVFPVPHADI(de)ISNMSQDEIAR	3085.5179	IPI0098726E	IPI0098726E	yes	no		3	2.5863E-08	106.1
EIIYSN(de)GSIIQMITMK	1987.0159	IPI0010853E	IPI0010853E	no	no	2,3		3.3275E-15E	258.92
EIIVHPN(de)YTR	1240.6564	IPI0011375C	IPI0011375C	yes	yes		2	0.0018788	148.56
EIIVDEIISN(de)SSTIASYK	1981.0256	IPI00173181	IPI00173181	yes	no		2	0.0004525	119.76
EIISN(de)ASDAIDKIR	1543.8206	IPI0012952E	IPI0012952E	no	no		2	7.939E-173	267.93
EIHIIQEQN(de)VSNVFIDKEEFFIGSK	2986.4825	IPI00605187	IPI00605187	yes	no	3,4		5.0585E-32	181.61
EIGVVMYN(de)CSCIAR	1670.7579	IPI00130624	IPI00130624	yes	yes		2	0.021038	85.45
EIGAIYN(de)CSNIAQDIEK	2050.0041	IPI0022141E	IPI0022141E	yes	no		2	2.3987E-261	295.79
EIEYYVQSFANAMYN(de)ACR	2284.9881	IPI0013260C	IPI0013260C	yes	yes		3	0.0003031	112.67
EHSIFIDIHPVTGIPMN(de)CSVK	2393.1872	IPI01008227	IPI01008227	yes	no	2,3		4.3065E-06	128.79
EGTYSIPTSN(de)FTVPDIEIPSWISTGNYR	3143.5088	IPI0011909E	IPI0011909E	yes	yes	2,3		5.6981E-09	106.1
EGSRTDDEVVQREEEAIQIDGIN(de)ASQIR	3156.5283	IPI0012952E	IPI0012952E	yes	yes	3,4		7.2319E-30	179.17
EGPRNISTCFSSGDIF(de)AAHNISER	2664.2351	IPI0012342E	IPI0012342E	yes	no		3	4.0253E-14C	247.92
EGN(de)CSAQSGIAWQDCDFKDAEEAATGECTATVGKR	3818.6207	IPI0011495E	IPI0011495E	yes	no		3	1.7229E-14	105.21
EGN(de)CSAQSGIAWQDCDFKDAEEAATGECTATVGK	3662.5196	IPI0011495E	IPI0011495E	yes	no		3	2.952E-38	173.11
EGN(de)CSAQSGIAWQDCDFK	2071.8364	IPI0011495E	IPI0011495E	yes	no		2	2.1761E-14E	185.33
EGKFDEVYDAIAGAHPN(de)ITVYK	2564.2911	IPI0011116E	IPI0011116E	yes	no		3	1.0059E-07	116.6
EGKFDEVYDAIAGAHPN(de)ITVYK	2436.1961	IPI0011116E	IPI0011116E	yes	no	2,3		1.0157E-06	154.42
EFVNIYSYDIIN(de)K	1616.8086	IPI0100818E	IPI0100818E	yes	no		2	0.01626	79.492
EFVENSECIQCHPECIPQAMN(de)ITCTGR	3279.3876	IPI0012119C	IPI0012119C	yes	no	3,4		2.3811E-13	120.25
EFQHN(de)STMYK	1446.6238	IPI0078844E	IPI0078844E	yes	no		2	0.0008005	143
EETIYDN(de)ATSSVADRK	1910.9222	IPI00223987	IPI00223987	yes	yes		2	0.022935	78.078
EEQFN(de)STFR	1156.5149	IPI0047524E	IPI0047524E	yes	no		2	0.0009509	145.25
EEN(de)ATIATYPEFGVIDIK	2008.9993	IPI00124221	IPI00124221	yes	no		2	1.2107E-48	209.25
EEEAIQIDGIN(de)ASQIR	1784.8905	IPI0012952E	IPI0012952E	yes	yes		2	0.0052099	91.657
EDYN(de)STIR	996.45124	IPI0055678E	IPI0055678E	yes	no		2	0.024111	121.09
EDVQAINIS(de)VPYGPPIEDFQR	2386.1805	IPI01023131	IPI01023131	yes	no		3	0.034685	47.088
EDTVTITCEGTHNPGN(de)SSTQWFHNGR	2944.2794	IPI0012948E	IPI0012948E	yes	no		3	3.2153E-13	130.89
EDSSRAVN(de)VSAIPANIQK	1897.9858	IPI0035430C	IPI0035430C	yes	no		2	0.018528	89.484
EDSCQINY(de)SEGPCIGMQR	2271.9195	IPI0012735E	IPI0012735E	yes	yes	2,3		2.9506E-62	218.14
EDRPFHQAVVN(de)DTQAFWHNK	2438.1516	IPI00406901	IPI00406901	yes	no		3	2.1459E-13	169.61
EDIIA(de)IRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no		2	1.4359E-39	201.52
ED(de)IIAIRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no		2	1.4359E-39	201.52
ECSPPKAN(de)ITSDEI	1559.7137	IPI0046673E	IPI0046673E	yes	yes		2	0.001625	125.03
ECIGN(de)CSEPDDPTK	1620.6396	IPI0012835E	IPI0012835E	yes	no		2	9.1144E-09	165.86
ECHTIQN(de)YTIWR	1619.7515	IPI0012522C	IPI0012522C	yes	no	2,3		8.1398E-21C	280.21
EAYKN(de)ISIIYSQMOK	1814.9237	IPI0022170E	IPI0022170E	yes	no	2,3		0.0038737	129.38
EATIVGEN(de)ETYPR	1477.7049	IPI0013114E	IPI0013114E	yes	no		2	0.0012631	128.54
EASQN(de)ITYICR	1353.6347	IPI0012112C	IPI0012112C	yes	yes		2	0.0069216	107.06
EASNHSSGAGIVQIN(de)KSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	2.1082E-12	119.38
EASNHSSGAGIVQIN(de)K	1610.8012	IPI00108844	IPI00108844	yes	no		2	1.3378E-92	235.88
EASN(de)HSSGAGIVQINKSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	2.1082E-12	119.38
EASN(de)HSSGAGIVQINK	1610.8012	IPI00108844	IPI00108844	yes	no		2	1.3378E-92	235.88
EASHYSIHDIVISYN(de)TSDSTVFPGAVAK	3007.4563	IPI00222967	IPI00222967	yes	no	2,3,4		5.6769E-31	183.56
EAQYN(de)STFR	1114.5043	IPI0080798E	IPI0080798E	yes	no		2	0.018705	114.4
EAN(de)ITEDQIIFFPK	1663.8457	IPI0012212E	IPI0012212E	yes	no		2	5.0461E-17E	263.56
EAIGNASQI(de)FDSWIK	1677.8362	IPI0013458E	IPI0013458E	yes	yes		2	0.0018262	114.01
EAFN(de)ETNQAIQTISR	1720.838	IPI00112614	IPI00112614	yes	yes		2	6.2011E-11C	240.2
EAFIPQGGSVQVN(de)CSSSCK	2053.9197	IPI0012297E	IPI0012297E	yes	no		2	0.0001072	139.02
EACIQHYVYN(de)ASYIVWK	2143.0197	IPI0012015E	IPI0012015E	yes	yes		2	0.0009393	114.29
E(de)SVYRNYISIFIADINQER	2216.0862	IPI0033131E	IPI0033131E	yes	no		3	0.0006581	131.48
E(de)MGNTVMDIIRNYTANATSSREEAWDYVQAQVK	3789.7727	IPI0010809E	IPI0010809E	yes	no	3,4		0.0076039	57.339
DYYPIN(de)ESIASIPR	1749.8938	IPI00121627	IPI00121627	yes	yes		3	0.0008729	143.25
DYYIN(de)KTENEK	1415.6569	IPI0039684C	IPI0039684C	yes	no		2	2.1765E-09	174.24
DYRPSAGN(de)NSIQDQTVVFK	2173.044	IPI0032246E	IPI0032246E	yes	no	2,3		0.0003008	149.95
DYCMYNNN(de)WTR	1698.6555	IPI0012177E	IPI0012177E	yes	yes		2	1.2685E-07	162.93
DWMPNN(de)HSVIIIIDDFESPQK	2384.1107	IPI0022183E	IPI0022183E	yes	yes		3	0.0025887	101.92
DWIWNQMHIDEKN(de)ESIPHYVGK	2867.3337	IPI0013818C	IPI0013818C	yes	yes		3	1.3212E-07	115.57
DWCN(de)WTIISR	1349.6187	IPI0012493E	IPI0012493E	yes	no		2	3.4026E-12	179.19
DVGSSTTN(de)NSQACAQFIEQYFHNSDITEFMR	3566.5467	IPI00130661	IPI00130661	yes	yes	3,4		1.3035E-20	126.46
DVFIPKPSWGN(de)HTPIFR	2010.0476	IPI00117312	IPI00117312	yes	yes		3	0.022711	91.969
DTYVN(de)ASQSIYGSSPR	1743.8064	IPI00122977	IPI00122977	yes	no		2	3.6139E-17E	265.77
DTISIN(de)ATNIK	1188.635	IPI0012119C	IPI0012119C	yes	no		2	1.09E-64	221.55
DTEENIHVIN(de)QTISEVIFPMDIK	2684.3367	IPI0035646E	IPI0035646E	yes	no		3	0.013617	64.26
DTCAQECSHFNI(de)TK	1709.7138	IPI00132474	IPI00132474	yes	no		2	2.0947E-26	185.95
DTAVEGEEIEVN(de)CTAMASKPATTIR	2692.2684	IPI0085672E	IPI0085672E	yes	no	2,3		5.7656E-08	112.58
DSYPDGN(de)ITWYRNGK	1784.8118	IPI0012137E	IPI0012137E	yes	no		2	0.0001376	154.72
DSYPDGN(de)ITWYR	1485.6525	IPI0012137E	IPI0012137E	yes	no		2	0.0041331	107.97
DSKIN(de)NTNVR	1159.5945	IPI00380801	IPI00380801	yes	no		2	8.7779E-05	167.12
DSGIWINGFDYTGMSHVTPHIPEIN(de)DTIR	3284.5561	IPI0040722E	IPI0040722E	yes	yes	3,4		1.9255E-14	146.76
DQQAEEANKN(de)ASIIK	1712.9057	IPI01016174	IPI01016174	yes	no		3	0.0077398	103.76
DQGNV(de)TDMASMK	1295.5486	IPI00471081	IPI00471081	yes	yes		2	1.3922E-66	227.06
DQDCDKF(de)NQCGTCTEFKECHTIQNYTIWR	3753.5705	IPI0012522C	IPI0012522C	yes	no	3,4		0.0043114	73.341
DQCIVDDITYNVN(de)DTFHKR	2352.0805	IPI0011353E	IPI0011353E	yes	no	2,3		6.455E-37	199.41
DQCIVDDITYNVN(de)DTFHK	2195.9793	IPI0011353E	IPI0011353E	yes	no	2,3		8.8629E-37	199.41
DNVN(de)CSGVYEHEPIEIGK	2058.9317	IPI00947577	IPI00947577	yes	yes		2	0.014157	78.021
DNTTC(de)YEFKK	1304.5707	IPI0011906E	IPI0011906E	yes	yes		2	0.000132	162.26
DNTTC(de)YEFK	1176.4757	IPI0011906E	IPI0011906E	yes	yes		2	0.003897	135.43
DNSCVDPHPVN(de)ATIVTR	1990.9531	IPI0013001C	IPI0013001C	yes	no	2,3		1.8122E-12	171.29
DNKIQIQQN(de)ISIEFIK	1930.0524	IPI0033067C	IPI0033067C	yes	yes		2	0.032577	83.087
DNATDS(de)VPIR	1086.5306	IPI0011906E	IPI0011906E	yes	yes		2	5.8108E-27	196.11

DN(de)YSVIIQENKPVGFVSVIK	2149.1419	IPI00623114	IPI00623114	yes	no		2	0.0014074	107.57
DN(de)HTSCAECIK	1333.5391	IPI0032060E	IPI0032060E	yes	no		2	0.013545	93.839
DN(de)DSIITRK	1060.5513	IPI0013116E	IPI0013116E	yes	yes		2	0.0037714	145.25
DN(de)ATQEEIIHYIEK	1701.821	IPI0092832C	IPI0092832C	yes	no	2,3		7.6723E-08	167.69
DMSDGFISN(de)ITIQR	1595.7614	IPI00272381	IPI00272381	yes	no		2	3.8711E-75	222.16
DMSDEIGCVN(de)VTQCDGPNK	2137.8715	IPI0031206E	IPI0031206E	yes	no		2	1.1671E-13E	248.46
DMEEFVQSSGDHGVVFSIGSMVSN(de)MTEEK	3274.4468	IPI0011232E	IPI0011232E	yes	no		3	0.010037	46.63
DKWGISDEHFQPRPEAVQFFN(de)VTTIQK	3216.5992	IPI0011137C	IPI0011137C	yes	yes		3	0.0027693	78.428
DKNGTAEPPIN(de)ASAGDQEEK	2226.0513	IPI0012334E	IPI0012334E	yes	yes	2,3		2.1349E-20	180.31
DKN(de)GTRAEPINASAGDQEEK	2226.0513	IPI0012334E	IPI0012334E	yes	yes	2,3		2.1349E-20	180.31
DKISPIHIA(de)INFSIDPK	1907.0516	IPI0011597E	IPI0011597E	yes	yes	2,3		0.0010966	125.22
DIVV(de)EISQWMKNPNNTIHPNIR	2894.4497	IPI0031950E	IPI0031950E	yes	no		3	3.4358E-08	136.68
DIVQNVFMSN(de)MSMDIQSHPSCPK	2751.2125	IPI0012119C	IPI0012119C	yes	no		3	1.175E-08	114.55
DIVGN(de)ITEIESEDIQIEAIIMR	2500.2731	IPI0012239E	IPI0012239E	yes	no		3	1.1962E-40	202.39
DITNIIN(de)NTFIR	1432.7674	IPI0065003E	IPI0065003E	yes	no		2	1.1512E-07	162.31
DISVFAPN(de)MTEIHKDVTQYR	2339.1831	IPI0085510E	IPI0085510E	yes	no		2	0.010485	88.574
DISGN(de)ETHFTGSEVGFIPISCR	2550.2173	IPI0012365E	IPI0012365E	yes	no		3	5.4059E-08	145.71
DINSQIEIQNVN(de)DTHITIIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes		3	1.2605E-24	162.71
DINSQIEIQN(de)VTNDTHITIIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes		3	1.2605E-24	162.71
DIN(de)HTAQGIIEKDSWK	1853.9272	IPI0012095E	IPI0012095E	yes	no		3	0.0024048	122.93
DIMDYKDTTGSHTFQGMFGCEITNN(de)R	3200.3638	IPI0013798E	IPI0013798E	yes	yes		3	2.3208E-13	131.33
DIKEAGN(de)ITTDGYEIIIGK	1935.9789	IPI0012143C	IPI0012143C	yes	no		2	0.0049766	103.66
DIIHSTGHN(de)ISR	1461.7688	IPI0022398E	IPI0022398E	yes	yes	2,3		4.521E-06	155.66
DIIFSDTECISNIQN(de)KTTYK	2504.1741	IPI0047108C	IPI0047108C	yes	no		2	0.0038438	91.64
DIGPAIAN(de)SSHDVK	1422.7103	IPI00108811	IPI00108811	yes	yes		2	2.7275E-75	223.06
DIFTNQSDFADTTKDTTITIVIH(de)K	2820.4182	IPI0011610E	IPI0011610E	yes	yes		3	1.0709E-08	121.25
DIFTN(de)QSDFADTTK	1601.7209	IPI0011610E	IPI0011610E	yes	no		2	0	328.14
DIEHHITNVNVSFYDDIVN(de)GTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	1.9334E-33	191.22
DIEHHITNVN(de)VSFYDDIVNGTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	1.9334E-33	191.22
DIAVGDDYTN(de)R	1237.5575	IPI00468674	IPI00468674	yes	no		2	0.0021933	122.7
DHVNVSMEIATDFPFN(de)TTEWEGYIPK	3039.396	IPI0013694E	IPI0013694E	yes	yes		3	3.2431E-13	119.38
DHVN(de)VSMIEATDFPFNTTEWEGYIPK	3039.396	IPI0013694E	IPI0013694E	yes	yes		3	3.2431E-13	119.38
DHIIN(de)KTHSICPR	1589.8096	IPI00118994	IPI00118994	yes	yes		2	0.017765	105
DGTSQPAICPQN(de)VTMNMEGIK	2290.0392	IPI00320204	IPI00320204	yes	yes		2	3.2633E-75	180.86
DGSQDFNE(de)TWENYEK	1860.7439	IPI0012820E	IPI0012820E	yes	yes		2	0.023134	114.01
DGSDSAAMVYN(de)SSQEWGIR	2071.8905	IPI0011952E	IPI0011952E	yes	yes		2	3.6724E-17E	269.49
DGQQN(de)ISIIYTEPGASQTQTGASFR	2668.2729	IPI0028481E	IPI0028481E	yes	no	2,3		1.0433E-43	194.97
DGQEIHPIETTVNPSGKNVSYN(de)ISSTVR	3041.5054	IPI0077577E	IPI0077577E	yes	no		3	0.0001841	89.272
DGQEIHPIETTVNPSGKN(de)VSYNISSTVR	3041.5054	IPI0077577E	IPI0077577E	yes	no		3	0.0001841	89.272
DGAIAN(de)ITIR	1084.6241	IPI0011906E	IPI0011906E	yes	yes		2	0.0018371	147.62
DGHFKEDPYWENMIN(de)HSVHR	2510.1186	IPI0041079E	IPI0041079E	yes	yes		3	0.0017968	99.891
DGAFFHHIHPSTPFNGNY(de)SFISVDATQRPGPK	3182.5322	IPI00226714	IPI00226714	yes	no		3	2.5537E-13	114.39
DEIGN(de)VSTSHIIDDSEMEIRPR	2837.4229	IPI0030903E	IPI0030903E	yes	yes		3	0.027095	63.225
DDYRPTWTIN(de)QTEPVAGNYYPVNTN	2969.3944	IPI0038130E	IPI0038130E	yes	yes	2,3		6.613E-25	181.83
DDIHPTIPAGQYFINI(de)TYNYPVHSFDGR	3249.552	IPI0038731E	IPI0038731E	yes	no	3,4		1.2507E-13	119.02
DCVSCQN(de)VSR	1223.5023	IPI0012119C	IPI0012119C	yes	no		2	0.0095447	115.29
DCDFIEDGEERN(de)CTGK	1943.7626	IPI0012728C	IPI0012728C	yes	yes		2	1.1618E-18	185.27
DAMVGN(de)YTCEVTEISR	1843.808	IPI0012483C	IPI0012483C	yes	no		2	4.9926E-17E	270.51
DAHFN(de)STITEFGETINNFVER	2440.1295	IPI0034606E	IPI0034606E	yes	yes		3	0.026075	73.918
DAAQCSGGSVAHIAEIGIPTN(de)ITHIIFR	3060.5815	IPI00331407	IPI00331407	yes	no		3	0.0007581	76.471
CVVHYEN(de)STVPEKK	1688.8192	IPI0040914E	IPI0040914E	yes	yes	2,3		3.0359E-36	201.48
CVVHYEN(de)STVPEK	1560.7242	IPI0040914E	IPI0040914E	yes	yes		2	0.0020616	132.59
CVAN(de)YTGNGR	1110.4876	IPI0011179E	IPI0011179E	yes	yes		2	0.025359	99.973
CTAQVCAGYCSNN(de)STCTVNQGNQPQCR	3134.2481	IPI0011906E	IPI0011906E	yes	yes		3	0.0011645	72.316
CSIIHSN(de)ISVKANVDQRIR	2209.175	IPI0013322E	IPI0013322E	yes	yes		3	0.039827	42.382
CSIIHSN(de)ISVK	1256.6547	IPI0013322E	IPI0013322E	yes	no		2	1.9627E-08	154.66
CQSPYQMN(de)GSDTVTCINGR	2186.9143	IPI0078844E	IPI0078844E	yes	no		2	0.0007113	99.392
CQEAIN(de)ATCK	1193.5169	IPI0031444E	IPI0031444E	yes	no		2	0.0053032	129.82
CQAYKN(de)NSESFIHYMYEVAR	2622.1995	IPI00130654	IPI00130654	yes	no		3	0.0042993	93.753
CQAIDFFPQN(de)ITMR	1739.8123	IPI0033144C	IPI0033144C	yes	no		2	0.0004618	143.93
CPMAGISHTTWHSN(de)R	1753.7777	IPI00130764	IPI00130764	yes	no	2,3		0.0005353	141.54
CPIITPFNDTNVVHTVNTAIAAFNTQNN(de)GTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		2.6384E-06	88.708
CPIITPFN(de)DTNVVHTVNTAIAAFNTQNGTYFK	3681.7886	IPI0012824E	IPI0012824E	yes	yes	3,4		2.6384E-06	88.708
CNSVITYN(de)ITPVVQK	1734.8975	IPI0022296E	IPI0022296E	yes	no		2	0.0008369	117
CN(de)ITIKDPTPADPIWYEA	2231.0933	IPI0011484E	IPI0011484E	yes	no		2	2.5626E-18	182.31
CN(de)ASSQFICSSGR	1472.6136	IPI0011906E	IPI0011906E	yes	yes		2	0.0004262	146.96
CIVPHTVN(de)ISSAWR	1638.83	IPI00129041	IPI00129041	yes	no		2	0.003893	138.55
CISPNVTSCACTIN(de)FTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes		2	1.4196E-61	214.66
CISPN(de)VTSCACTINFTIK	2084.9693	IPI0038731E	IPI0038731E	yes	yes		2	1.4196E-61	214.66
CISKN(de)YTTDIITK	1555.7916	IPI0012464C	IPI0012464C	yes	yes		2	1.8845E-21	147.73
CIQMSSFAN(de)R	1212.538	IPI0032006E	IPI0032006E	yes	no		2	3.0931E-77	235.01
CIQHFYGPNEHCFN(de)R	2114.8952	IPI0013042C	IPI0013042C	yes	no		2	0.0024423	119.54
CIPHFAMIGNDTVMCTEQGN(de)WTRIEPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no	3,4		8.7719E-05	85.573
CIPHFAMIGNDTVMCTEQGN(de)WTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	1.0379E-09	148.2
CIPHFAMIGN(de)DTVMCTEQGNWTRIEPECIEVK	3705.687	IPI0032246E	IPI0032246E	yes	no	3,4		8.7719E-05	85.573
CIPHFAMIGN(de)DTVMCTEQGNWTR	2737.1869	IPI0032246E	IPI0032246E	yes	no		3	1.0379E-09	148.2
CIN(de)HTTQK	1000.476	IPI0012526E	IPI0012526E	yes	yes		2	0.012795	144.12
CHEGN(de)GTFECCGACR	1653.6082	IPI00132474	IPI00132474	yes	yes		2	0.0004315	150.34
CGNCN(de)ITSIEDEDFCK	1960.7601	IPI0013759E	IPI0013759E	yes	yes		2	3.3069E-23E	287.91
CFNAMEVDAIN(de)SSHPVSTPVENPAQIR	2982.3964	IPI0031859E	IPI0031859E	yes	no	2,3,4		1.2606E-49	198.1
CFMAN(de)GTWGYPFHDGDYIK	2277.9612	IPI0012901C	IPI0012901C	yes	no	2,3		0.0015904	101.67
CF(de)ANKVNISFPSAQSPASDTHIK	2631.3115	IPI0062466E	IPI0062466E	yes	yes	2,3		3.2122E-18	175.52
CEVICN(de)QSNKPITITVEQSR	2375.1573	IPI0062653E	IPI0062653E	yes	yes		2	0.0057112	90.718
CEQEASEDIKPAITGN(de)KTMQYVPNSHDVK	3288.5391	IPI0013480E	IPI0013480E	yes	no		3	0.0066035	58.924
CEQEASEDIKPAITGN(de)K	1888.8837	IPI0013480E	IPI0013480E	yes	no		2	7.4614E-92	235.26
CDGDFDCEDRTDEAN(de)CSVK	2291.8365	IPI0051536C	IPI0051536C	yes	no		2	0.0011016	124.29

CCGWVSHYN(de)WTENEEIMGFTK	2647.093	IPI0010809E	IPI0010809E	yes	no		3	9.8235E-06	113.86
CAMDIGVNYIGTVN(de)VTHTGIQCQIWR	3005.431	IPI0011420E	IPI0011420E	yes	yes		3	0.014261	55.302
CAISHAITIEFHQDGNPENVGIYN(de)ISR	3111.4832	IPI0022242E	IPI0022242E	yes	yes	3,4		7.9279E-19	166.65
AYVPN(de)ATWYDYETGEEIGWR	2419.0757	IPI0084869E	IPI0084869E	yes	yes		2	1.8246E-05	147.49
AYTIFVPTNHSIETQGN(de)NSVIGIDTVR	2945.4883	IPI0098726E	IPI0098726E	yes	no		3	1.3981E-06	97.5
AY(de)AISGPTVQDGIPPFNWNRFNETIHR	3099.5315	IPI00471081	IPI00471081	yes	yes		3	5.9147E-08	104.52
AWN(de)YTVDTPHGMFVSGTPEQSVWITDVGSGPYGHTVK	4166.9473	IPI0022856E	IPI0022856E	yes	yes		4	0.0004875	51.471
AWEKEIHHI(de)QEQNVSNNFIDKEEFFIGSK	3500.7365	IPI00605187	IPI00605187	yes	no	3,4		3.4384E-39	186.82
AVYEAIRN(de)CSIEDDSVR	1995.932	IPI00856861	IPI00856861	yes	no		2	0.0011079	127.83
AVVGSYTTTN(de)VSIIAPR	1747.9468	IPI00330481	IPI00330481	yes	yes		2	3.0362E-06	159.88
AVTSISHDGSVICTFTAN(de)STYTK	2459.1639	IPI0045348E	IPI0045348E	yes	yes		2	1.333E-08	137.72
AVN(de)QTGAIYQCDYSTSR	1932.8636	IPI00120674	IPI00120674	yes	no		2	2.0752E-47	204.05
AVISMIN(de)ETMNEAPEETK	2005.9336	IPI0087541E	IPI0087541E	no	no	2,3		9.4205E-29	300.54
AVIGDHGDEIFSVFGSPFIKDGASEEETN(de)ISK	3394.6205	IPI0038728E	IPI0038728E	yes	yes	3,4		2.2955E-21	158.29
AVDENN(de)ESTACFIIRSGCDVNSPR	2710.2075	IPI0032984E	IPI0032984E	yes	yes		3	0.031756	67.866
AVCGIN(de)TSDRCDFVR	1768.7985	IPI00127134	IPI00127134	yes	no		2	0.0082643	110.92
ATVN(de)DSGEYR	1110.4942	IPI0012948E	IPI0012948E	yes	no		2	0.0011941	155.48
ATTHAQGHQPVIGN(de)DTIR	1914.966	IPI0012946E	IPI0012946E	yes	yes		2	0.022163	84.653
ATSQFQN(de)GSIIAFIPGISQCTVYSAK	2888.4378	IPI0034014C	IPI0034014C	yes	yes		3	1.0268E-05	91.643
ATPNEGFFNQN(de)ITTFYYDR	2297.0389	IPI0031553E	IPI0031553E	yes	yes	2,3		1.4067E-19	184.15
ATIITFICDRDAGVGFPEYQEEDN(de)STYNFR	3527.594	IPI00308971	IPI00308971	yes	yes		3	0.0043742	67.31
ATHN(de)DSGSYFCR	1413.5732	IPI0016287C	IPI0016287C	yes	yes		2	0.022619	82.202
ATHAQPAIVTAPN(de)ETSPK	1831.9428	IPI0013795E	IPI0013795E	yes	yes		2	0.016444	75.564
ASVVN(de)VTQHCTMESWESMNEVAR	2664.1731	IPI0012124C	IPI0012124C	yes	yes		3	2.5965E-06	107.33
ASSIMVN(de)ITEIFPKPK	1773.9699	IPI00406901	IPI00406901	yes	no		2	1.1813E-35	201.3
ASQQISN(de)ETSSFGFNIRK	2126.0756	IPI0015325E	IPI0015325E	yes	no		2	0.0003522	111.22
ASQQISN(de)ETSSFGFNIR	1997.9807	IPI0015325E	IPI0015325E	yes	no		3	1.064E-26	186.72
ASGN(de)FSQVDWFIHK	1747.8682	IPI0046912E	IPI0046912E	yes	no		3	0.0047222	95.981
ARIQGGVIAQIIKN(de)ITIMATTSQFPK	2911.6681	IPI0015405E	IPI0015405E	yes	no		3	4.8704E-13	131.33
AQTN(de)YTCVAEIIYR	1700.8192	IPI0032305E	IPI0032305E	yes	no		2	4.035E-75	220.46
AQAGNKSQDSGIAEMEEIPVPHNIKINN(de)ITCDSFK	3854.8567	IPI00969894	IPI00969894	yes	yes		4	0.022351	46.785
AQAGN(de)KSQDSGIAEMEEIPVPHNIKINNITCDSFK	3854.8567	IPI00969894	IPI00969894	yes	yes		4	0.022351	46.785
AQAAIDKAN(de)ASR	1214.6367	IPI0011906E	IPI0011906E	yes	yes		2	0.0003854	149.69
APSN(de)VSTVIHIIYIPEEAK	2080.1205	IPI00121421	IPI00121421	yes	no	2,3		0.0002308	109.72
APQHVVNHIPPYTN(de)VSIK	2013.0796	IPI0012304C	IPI0012304C	yes	no		3	0.0043164	95.428
APIMPWNESSIFHIPRPVSIN(de)MTVK	2863.4877	IPI0093088E	IPI0093088E	yes	no		3	0.025202	64.723
APIMPWN(de)ESSIFHIPRPVSINMTVK	2863.4877	IPI0093088E	IPI0093088E	yes	no		3	0.025202	64.723
APDSN(de)SSSIITTR	1460.7471	IPI0046699E	IPI0046699E	yes	no		2	0.0007116	128.06
ANQVIPHN(de)TTFQTEPTK	2038.0484	IPI00466371	IPI01026704	no	no	2,3		7.8834E-05	151.44
ANIQFGENG(de)TISAVTNK	1863.9327	IPI00127447	IPI00127447	yes	yes	2,3		9.9933E-15	258.8
ANIINFEN(de)NTFVINIEQITQDDTGSYK	3197.5517	IPI0031005E	IPI0031005E	yes	no	2,3		4.4988E-14	150.03
ANEQVIQNIN(de)HTYK	1670.8376	IPI00876541	IPI00876541	yes	no		2	0.0013977	140.31
ANA(de)STFAVPSVPSNSADTR	1890.9072	IPI0011906E	IPI0011906E	yes	yes		2	0.015995	73.918
AN(de)YTIK	821.4647	IPI0013820E	IPI0013820E	yes	no		2	1.3935E-12	182.68
AN(de)TTQPGIVEGGQVIK	1610.8628	IPI0012024E	IPI0012024E	yes	no		2	2.5563E-05	156.11
AN(de)TSIEIIIIEGVR	1413.7827	IPI0098851E	IPI0098851E	yes	no		2	0.0013836	116.63
AN(de)KSSDIVSANR	1260.6422	IPI0013664E	IPI0013664E	yes	yes		2	0.0083967	113.99
AN(de)ISSQVIK	958.54475	IPI00322867	IPI00322867	yes	no		2	0.013398	119.68
AN(de)HSGAVVIKR	1263.7412	IPI0042083E	IPI0042083E	yes	no		2	0.013595	97.463
AN(de)ESRIEADQIYR	1692.8067	IPI00224237	IPI00224237	yes	no		2	6.7502E-08	162.94
AN(de)DTREEAGIPAAGEDETSWTER	2504.1052	IPI00653847	IPI00653847	yes	no		3	0.0080982	80.142
AN(de)DSDQGANAIEIDYTFHQAPEVVR	2802.2957	IPI00719927	IPI00719927	yes	no		3	7.7893E-09	143.04
AN(de)DSDQGANAIEIDYTFHQAPEVVR	2646.1946	IPI00719927	IPI00719927	yes	no	2,3		8.3534E-09	143.91
AMN(de)TSQVEAMGIQMPGYRDPYHGRPITK	3260.5893	IPI0016987C	IPI0016987C	yes	yes		3	7.5267E-07	92.147
AMN(de)ISASSMTITWK	1539.7425	IPI0046942E	IPI0046942E	yes	no		2	2.977E-75	220.46
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYK	3694.9116	IPI0038728E	IPI0038728E	yes	yes	3,4,5,6		8.476E-08	94.594
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYK	3566.8167	IPI0038728E	IPI0038728E	yes	yes	3,4		4.1176E-15	113.31
AMIINQHVPMESSHIIQFVN(de)WSSIIPER	3275.6584	IPI0038728E	IPI0038728E	yes	yes	3,4,5		4.4463E-14	140.59
AMGVNVIAANTHN(de)TSMHMTGSGIYSPEAVR	3115.4638	IPI0023041E	IPI0023041E	yes	yes	3,4		9.4849E-16	112.48
AMFN(de)ITIIYPNNIIAISNMIPK	2490.3379	IPI0031950E	IPI0031950E	yes	yes	2,3		8.53E-07	147.35
AISPN(de)STISSAPK	1271.6721	IPI00460291	IPI00460291	yes	no		2	0.0014887	116.19
AINASAN(de)ITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no		2	6.1681E-20	273.78
AIN(de)VTISSMGRNGIK	1559.8454	IPI00131091	IPI00131091	yes	no		2	0.012135	109.84
AIN(de)VTISSMGR	1147.6019	IPI00131091	IPI00131091	yes	no		2	3.6127E-05	155.86
AIN(de)SSTEDGIK	1133.5564	IPI0012916E	IPI0012916E	yes	yes		2	0.010755	101.39
AIN(de)GSAIYTGSIDFVR	1769.8948	IPI00877197	IPI00877197	yes	no	2,3		0	326.05
AIN(de)DSIHYINR	1314.668	IPI0080834E	IPI0080834E	yes	no		2	9.981E-05	151.1
AIN(de)ASANITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no		2	6.1681E-20	273.78
AIMKEVMNIIQPIN(de)VTK	1941.0791	IPI0012605C	IPI0012605C	yes	no	2,3		0.0019582	138.97
AIMDIDCQIEKN(de)QTK	1805.8652	IPI0065863E	IPI0065863E	yes	yes		2	4.8222E-50	164.15
AIIQGIPEQN(de)YTVQIIAYYKDK	2680.4476	IPI0033063E	IPI0033063E	yes	no		3	0.027557	69.148
AIIQGIPEQN(de)YTVQIIAYYK	2437.3257	IPI0033063E	IPI0033063E	yes	no		3	0.0070421	77.506
AIGYEN(de)ATQAIGR	1362.6892	IPI0011980E	IPI0011980E	yes	no		2	3.4119E-44	203.87
AIGITEMFEPSKAN(de)FTK	1882.9499	IPI0011506E	IPI0011506E	yes	yes		2	0.0031496	138.05
AIEIQFGMN(de)ASSSIFFIQGV	2314.178	IPI0046921E	IPI0046921E	yes	yes		3	0.0049735	81.51
AIDIDPSKTN(de)VSGGAIAGHPIGGSGSR	2646.3725	IPI0022643C	IPI0022643C	yes	yes	3,4		2.3498E-38	189.84
AIAGIVYN(de)SSGTEPCYDIYR	2248.047	IPI0033155C	IPI0033155C	yes	yes	2,3		4.6269E-29	192.6
AHFSSIN(de)ITIR	1257.683	IPI00466371	IPI01026704	no	no		2	1.7749E-29	186.81
AGYFN(de)FTSATITYIAQEDGPVIGSTSAPGQGGIIAQR	3856.9272	IPI0046718C	IPI0046718C	yes	yes	3,4		1.097E-33	122.7
AGVVFN(de)CSIR	1220.6336	IPI0031477E	IPI0031477E	yes	yes		2	0.010265	99.215
AGPN(de)GTIFVVDAYK	1450.7456	IPI0022199E	IPI0022199E	yes	yes		2	5.1633E-27	192.32
AGIN(de)ASYSEK	1038.4982	IPI00308971	IPI00308971	yes	yes		2	0.001301	155
AGEQINNHVKN(de)KTQGK	1764.9231	IPI0011610E	IPI0011610E	yes	no	2,3		0.0001269	155.57
AGEQINNHVKN(de)K	1350.7004	IPI0011610E	IPI0011610E	yes	no		2	0.020861	136.53
AFYN(de)GTWYRR	1332.6364	IPI0085831E	IPI0085831E	yes	no		2	0.027548	98.033
AFYN(de)GTWYR	1176.5352	IPI0085831E	IPI0085831E	yes	no		2	0.012374	120.99



AFVEN(de)ITVIENSIVFK	1821.9877	IPI0074238E	IPI0074238E	yes	no	2,3	0	357.71
AFNISPN(de)DTSSGSCGINIVTIK	2294.1213	IPI0046921E	IPI0046921E	yes	yes	2,3	3.3828E-06	137.12
AFN(de)ITWISTDFK	1441.7242	IPI0011806E	IPI0011806E	yes	no		2 4.1559E-08	166.48
AFN(de)ECCTIANK	1326.5697	IPI0033083E	IPI0033083E	yes	yes		2 1.5991E-15	185.25
AFMN(de)SSFTIDPK	1356.6384	IPI0012136E	IPI0012136E	yes	no		2 4.5096E-06	155.86
AFITNF(de)SMIIDGVTYPGVVK	2171.1337	IPI00312711	IPI00312711	yes	no	2,3	3.3094E-50	208.49
AFIN(de)GTGVETVVSADIPNAHGIAVDWVSR	2994.5199	IPI0011906E	IPI0011906E	yes	yes	3,4	3.2171E-19	162.01
AFFDETKN(de)NTR	1341.6313	IPI00120674	IPI00120674	yes	no		2 0.0036529	138.99
AEQITIHAIGIGEANKT(de)QIR	2162.1808	IPI0067579E	IPI0067579E	yes	no	3	0.010911	85.937
AEPPINASAGDQ(de)EEK	1554.7162	IPI0012334E	IPI0012334E	yes	yes		2 0.0005839	146.2
AEISN(de)HTRPVIIIPGCIGNRIEAK	2643.4279	IPI0013350C	IPI0013350C	yes	yes	3,4	0.0005349	91.64
AEISN(de)HTRPVIIIPGCIGNR	2202.1692	IPI0013350C	IPI0013350C	yes	yes	2,3	2.5303E-05	136.34
AEDYGPVEVISHWHPN(de)ITINIVDDHTPWVK	3480.7103	IPI0012162E	IPI0012162E	yes	yes	3,4	7.5641E-06	90.1
ADSIYSQVVGISASQAN(de)ISK	2037.0378	IPI0011511E	IPI0011511E	yes	yes	2,3	3.4057E-23E	280.62
ADN(de)YTYEHIR	1280.5786	IPI0027313E	IPI0027313E	yes	yes		2 0.028903	89.548
ADANPPATEYHWTTIN(de)GSIPK	2282.0968	IPI0031140E	IPI0031140E	yes	yes	2,3	4.2008E-06	130.89
ACN(de)ATNWIEMYFNK	1760.7651	IPI0013260C	IPI0013260C	yes	no		2 3.0161E-08	160.78
AAN(de)CTQVIVWHTR	1554.7725	IPI00116744	IPI00116744	yes	yes		2 0.030557	76.01
AAGVIEDVYN(de)RTQGIIAGHGIIQIA	2578.3867	IPI00169617	IPI00169617	yes	yes		2 4.801E-08	112.47
AAGVIEDVYN(de)R	1205.6041	IPI00169617	IPI00169617	yes	yes		2 7.2755E-08	138.76
AAEN(de)FTIIVK	1104.6179	IPI0047108E	IPI0047108E	yes	no		2 0.0022375	129.82
AACAVRPQEVMTMVN(de)GTITNPVTGK	2513.273	IPI00308971	IPI00308971	yes	yes	2,3	4.3569E-08	118.37
A(de)YVFERNQSVGDPNVDIIR	2191.1022	IPI00127447	IPI00127447	yes	yes	2,3	1.8175E-48	209.66
A(de)VAYGEKNITFQGPIPK	1831.9832	IPI00111794	IPI00111794	yes	no	2,3	6.6698E-09	168.69
A(de)RNISGVVIADHSGSFHNR	2036.03	IPI00118674	IPI00118674	yes	yes		3 0.0005256	123.59

N-terminal Ser/Thr ratio 15 1.08%

### Conventional HC strategy 2

#### De-glycopeptides Sequence

De-glycopeptides Sequence	Mass	Proteins	Leading r	Unique (C	Unique (P	Charges	PEP	Score
YYN(de)YTISINGK	1334.6507	IPI0022142E	IPI0022142E	yes	yes		2 0.0007149	155.48
YYN(de)QSKGGSHTFQR	1671.7754	IPI00850057	IPI00850057	no	no		2 0.0023752	132.97
YYN(de)QSAGGSHTIQWMAGCDVESDGR	2788.1606	IPI0098582E	IPI0098582E	yes	no		3 6.6265E-84	258.37
YYHGEISYIN(de)VTRK	1741.8788	IPI00404551	IPI00404551	yes	no	2,3	1.6875E-06	168.89
YYHGEISYIN(de)VTR	1613.7838	IPI00404551	IPI00404551	yes	no	2,3	8.0537E-14	184.98
YVYVADIIAHEIHVIEKQPNMN(de)ITQIK	3178.6849	IPI00310567	IPI00310567	yes	yes	3,4	5.8569E-69	249.2
YVMIPVADQDKCVVHYEN(de)STVPEKK	2948.4412	IPI0040914E	IPI0040914E	yes	yes		3 5.5065E-09	159.06
YTSFEYPKNISFA(de)CNPGFINGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no		3 1.9882E-24	207.86
YTSFEYPKN(de)ISFACNPGFFINGTSSSK	3062.412	IPI0032246E	IPI0032246E	yes	no		3 1.9882E-24	207.86
YTGN(de)ASAIIPDQGR	1687.8893	IPI0013183C	IPI0013183C	yes	no	2,3	1.9261E-77	260.24
YTGN(de)ASAIIPDQGR	1721.8737	IPI0013563E	IPI0013563E	yes	no	2,3	4.64E-13	195.89
YSVQHMYFTYN(de)ISDTEHFPNAISK	2891.3225	IPI0046921E	IPI0046921E	yes	yes	3,4	2.5493E-07	172.69
YSVIITAEKPVGDISSPN(de)ETK	2247.1634	IPI00125497	IPI00125497	yes	yes	2,3	3.4224E-08	184.56
YSQAAN(de)STKEIDDCEQANK	2170.9437	IPI0018735E	IPI0018735E	yes	yes		2 0.0008741	124.31
YSNESQDISVNGYN(de)CTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3	3.103E-16	160.84
YSN(de)ESQDISVNGYNCTTSSVSSAIR	2738.209	IPI00322304	IPI00322304	yes	yes	2,3	3.103E-16	160.84
YSIYKDPAGWISINPIN(de)GTVDTTAVIDR	3078.5662	IPI0012374E	IPI0012374E	yes	yes		3 1.817E-05	99.614
YRAEFAVAN(de)DTGFVDIPQKEK	2397.1601	IPI00128154	IPI00128154	yes	no	2,3	8.5064E-28	218.79
YQTIN(de)CSVNVN	1352.6507	IPI0042083E	IPI0042083E	yes	no		2 0.0028127	132.17
YQMDN(de)VSSIVQIIGSHIEDVNADIIQTK	3129.5652	IPI00330594	IPI00330594	yes	yes	3,4	2.1055E-11	140.45
YQHVGQVIFQAPEAGGRWN(de)QTQK	2754.399	IPI00894972	IPI00894972	yes	no		3 4.2253E-07	180.31
YQFNTNVVFSND(de)GTIVDR	2087.9912	IPI0032137E	IPI0032137E	yes	no	2,3	1.5995E-08	189.77
YQFEVICPAPRPGAASN(de)ISFQAPFR	2822.3963	IPI0031115E	IPI0031115E	yes	yes		3 1.2639E-08	128.67
YQEIIIEISSIN(de)KTQWK	2108.079	IPI0099093E	IPI0099093E	yes	no	2,3	1.3759E-13E	294.05
YQEGDITIYVINIHN(de)VTK	2119.095	IPI0017009E	IPI0017009E	yes	no		2 2.3568E-05	176.11
YPTPGEAPGVVGNFN(de)K	1645.81	IPI00112614	IPI00112614	yes	yes		2 0.0004048	141.85
YPQDYQFYIQN(de)FTAIPINTVPPQR	3011.5181	IPI0011085E	IPI0011085E	yes	no	2,3,4	9.3345E-10	180.8
YPNN(de)GSIVWGK	1233.6142	IPI0084869E	IPI0084869E	yes	yes		2 4.2663E-05	163.12
YPHNHHVVNNTIEGNC(de)SSK	2205.9974	IPI0022142E	IPI0022142E	yes	yes		3 0.036124	69.979
YPHNHHVVNNTIEGN(de)CSSK	2205.9974	IPI0022142E	IPI0022142E	yes	yes		3 0.036124	69.979
YPHKPEIN(de)STTHPGADIKENFCR	2710.2922	IPI0011420E	IPI0011420E	yes	yes		3 0.0014367	105.91
YPHKPEIN(de)STTHPGADIK	2004.0065	IPI0011420E	IPI0011420E	yes	yes	2,3	0.0005818	166.48
YPAEGQRPIPN(de)VSIPR	1906.0425	IPI00453524	IPI00453524	yes	yes	2,3	0.0006405	142.45
YN(de)HTGQVVIYK	1320.6826	IPI00466371	IPI01026704	no	no	2,3	0.0002469	160.67
YN(de)GSIGIWR	1064.5403	IPI0013329E	IPI0013329E	yes	no		2 0.019871	117.7
YMGIPEDNIDHYRN(de)STVMSR	2607.221	IPI0012581E	IPI0012581E	yes	no	2,3	0.0020032	96.544
YMDQNSDGWQDGVGYIN(de)SSEGAVGR	2704.146	IPI0011423E	IPI0011423E	yes	no		3 3.0204E-07	122.34
YMAIAIN(de)R	950.50077	IPI00123814	IPI00123814	yes	yes		2 0.029971	113.7
YKYETTISPTSNISSNSFICIEN(de)R	2823.3385	IPI0062583E	IPI0062583E	yes	no		3 2.9837E-39	223.89
YKYETTISPTSN(de)ISSNSFICIENR	2823.3385	IPI0062583E	IPI0062583E	yes	no		3 2.9837E-39	223.89
YKGTAGNAIMDGASQIVGEN(de)R	2151.0379	IPI0027907E	IPI0027907E	yes	yes	2,3	7.8819E-05	171.84
YKGN(de)ASAIIPDQGR	1748.921	IPI0012807E	IPI0012807E	yes	yes		2 0.0070309	110.12
YKGIN(de)ITEDTYKPR	1696.8784	IPI0011980E	IPI0011980E	yes	yes		2 4.6929E-17E	311.99
YIYIASN(de)HSNK	1308.6463	IPI0011817E	IPI0011817E	yes	no		2 0.0081211	108.7
YIQVVYIHNND(de)ISAVGQNDFCR	2623.2602	IPI0012319E	IPI0012319E	yes	yes		3 1.1425E-64	248.18
YIQPIAVQFTN(de)ITVDTEIR	2333.2631	IPI0012155C	IPI0012155C	yes	yes	2,3	2.2121E-08	188.26
YIN(de)FSTSEKEK	1344.6561	IPI0013501C	IPI0013501C	yes	no		2 0.0044621	134.3
YIN(de)ETQQITQKIKTK	1835.0153	IPI0012322E	IPI0012322E	yes	yes		2 0.010629	115.1
YIN(de)ETQQITQKIK	1605.8726	IPI0012322E	IPI0012322E	yes	yes		2 1.2402E-13	186.16
YIN(de)ETQQITQK	1364.6936	IPI0012322E	IPI0012322E	yes	yes		2 2.407E-16	187.85
YIKNGN(de)ATIIR	1261.7143	IPI0098582E	IPI0098582E	no	no	2,3	4.2568E-11	184.24
YIKNGN(de)ATIIR	1261.7143	IPI0098582E	IPI0098582E	no	no	2,3	4.2568E-11	184.24
YIINGSHAN(de)ETR	1373.6688	IPI0012996E	IPI0012996E	yes	yes		2 0.0061022	107.65
YIIN(de)GSHANETR	1373.6688	IPI0012996E	IPI0012996E	yes	yes		2 0.0061022	107.65
YIEIGN(de)ETIIR	1319.7085	IPI00850057	IPI00850057	yes	no		2 3.4822E-24	206.36



YHYN(de)GTIDGTIFDSSYSR	2208.0124	IPI0013048€	IPI0013048€	yes	yes	2,3	2.325E-27	215.98
YHYN(de)GTFIDGTIFDSSHNR	2243.0032	IPI0013048€	IPI0013048€	yes	yes		2 2.8036E-37	226.57
YHYN(de)CSIIDGTR	1497.6671	IPI0012249€	IPI0012249€	yes	no		2 0.020508	90.793
YHYN(de)ASIIDGTIDSTWNIGK	2380.1699	IPI0013048€	IPI0013048€	yes	yes		3 0.0001119	124.68
YHVIHIN(de)TTK	1224.6615	IPI00131021	IPI00131021	yes	yes		2 0.018875	105.98
YHHYSSN(de)FSIPK	1478.6943	IPI0012948€	IPI0012948€	yes	no	2,3	6.0177E-19	196.24
YHGFIN(de)TSYHR	1393.6527	IPI0015405€	IPI0015405€	yes	no	2,3	0.0009137	152.7
YHDYYITSTSN(de)GSIEGIENR	2318.0451	IPI00130754	IPI00130754	yes	yes		3 0.0007777	108.75
YGTAIVHIYVNETIAN(de)R	1933.0058	IPI00719927	IPI00719927	yes	no		2 0.00437	118.31
YGTAIVHIYVN(de)ETIANR	1933.0058	IPI00719927	IPI00719927	yes	no		2 0.00437	118.31
YGN(de)MTQDHSVMIITR	1814.8556	IPI0011589€	IPI0011589€	yes	no	2,3	0.0024611	107.65
YGMQNSGNEAAWN(de)YTIEQYQK	2494.0859	IPI0013458€	IPI0013458€	yes	yes	2,3	3.8767E-95	268.25
YGKN(de)DSITITQIK	1479.7933	IPI0012342€	IPI0012342€	yes	no	2,3	8.3662E-42	232.37
YGIVVIDECPGVGIVIPQSFGN(de)ESIR	2817.4371	IPI0030923€	IPI0030923€	yes	no		3 4.1719E-09	145.44
YGHPNGTQGN(de)STMWPVFTSTEQK	2566.1547	IPI0013116€	IPI0013116€	yes	yes		3 2.5164E-05	114.46
YGHPN(de)GTQGNSTMWPVFTSTEQK	2566.1547	IPI0013116€	IPI0013116€	yes	yes		3 2.5164E-05	114.46
YFTNRI(de)DVSQNVSSDTDQSCESTK	2780.2195	IPI0012076€	IPI0012076€	yes	no		3 2.1599E-06	154.84
YFFIQSVSDSDGRN(de)FTSSPPGQTQFK	2852.3406	IPI0034468€	IPI0034468€	yes	yes		3 9.9149E-24	203.71
YEVVDWNQSTIDCVDPISIAAN(de)R	2652.2126	IPI0033103€	IPI0033103€	yes	no	2,3	6.0207E-15	200.99
YEVVDWN(de)QSTIDCVDPISIAANR	2652.2126	IPI0033103€	IPI0033103€	yes	no	2,3	6.0207E-15	200.99
YEQIQN(de)ETR	1179.552	IPI0015405€	IPI0015405€	yes	no		2 0.0019903	164.65
YEQAKN(de)ISQDIEK	1564.7733	IPI0040001€	IPI0040001€	yes	no		2 0.0073126	152.88
YE(de)TEKNNGAGYFIEHIAFK	2230.0695	IPI0011188€	IPI0011188€	yes	no		3 0.0002611	171.56
YDVN(de)RSDSGGSIQIEEGYFVHHFAPENIPTMSK	3723.7264	IPI00312711	IPI00312711	yes	no	3,4	9.499E-15	122.8
YDKSEVDGAAAMIN(de)YTHIIMEAVPGHPAIYR	3431.6642	IPI0087485€	IPI0087485€	yes	no	3,4	4.9929E-15	149.62
YDIPASINYIIN(de)K	1522.8031	IPI0012926€	IPI0012926€	yes	yes		2 0.0002328	159.08
YAVYWN(de)SSNPR	1355.6258	IPI00114364	IPI00114364	yes	no		2 0.0048513	119.76
YATENDISSIHNSTITCIVN(de)QTTSTITGTSPEIMEK	3854.819	IPI0023031€	IPI0023031€	yes	no	3,4	3.3432E-12	114.35
YATENDISSIHN(de)STITCIVNQTTSTITGTSPEIMEK	3854.819	IPI0023031€	IPI0023031€	yes	no	3,4	3.3432E-12	114.35
YAFQEIIIGDISFIPTIN(de)FSK	2415.2726	IPI00122557	IPI00122557	yes	no	2,3	9.4661E-34	195.96
WVITAAHCIIYPPWDKN(de)FTENDIIVR	3170.6012	IPI0011420€	IPI0011420€	yes	yes	3,4	5.1621E-06	117.31
WVGN(de)WTYEIK	1294.6346	IPI0015314€	IPI0015314€	yes	yes		2 0.01621	108.7
WVDGASIN(de)FSHWNSGEPNDSR	2374.0363	IPI0022335€	IPI0022335€	yes	yes	2,3	0.0001248	121.46
WTGHN(de)VTVVQR	1295.6735	IPI0011906€	IPI0011906€	yes	yes	2,3	0.0021103	136.96
WTDNTEYN(de)NTIPIRGEER	2207.0243	IPI0027643€	IPI0027643€	yes	yes	2,3	0.0002945	147.56
WSN(de)DSATISFTKPWSQK	2038.9749	IPI0032006€	IPI0032006€	yes	no	2,3	1.1068E-05	181.41
WSFSN(de)GTSWQK	1326.5993	IPI0031557€	IPI0031557€	yes	yes		2 2.2279E-12	192.5
WQN(de)DTGSPDKSDISQK	1804.8228	IPI0022230€	IPI0022230€	yes	yes		2 6.4596E-37	224.59
WKPPSDPNGN(de)ITHYIVYWER	2471.2022	IPI0012835€	IPI0012835€	yes	no		3 0.000177	146.81
WIQQEFHNSN(de)ASIPHTHIVTFNVIEK	2837.4501	IPI0062434€	IPI0062434€	yes	yes		3 3.0912E-07	141.31
WIN(de)ETQIK	1030.5447	IPI00453524	IPI00453524	yes	yes		2 0.01478	131.06
WIIVGAPTASWISN(de)ASVVNPGAIYR	2641.4017	IPI00121334	IPI00121334	yes	no		3 0.0004503	89.668
WICDGDNDCGNSEDESN(de)ATCSAR	2631.9497	IPI0011906€	IPI0011906€	yes	yes	2,3	8.1908E-06	111.53
WICDGDN(de)DCGNSEDESNATCSAR	2631.9497	IPI0011906€	IPI0011906€	yes	yes	2,3	8.1908E-06	111.53
WGHN(de)VTEFQQR	1400.6585	IPI0075438€	IPI0075438€	yes	yes	2,3	0.0011476	146.16
WGEVDIIGN(de)CSQFYPDR	2054.9156	IPI0032067€	IPI0032067€	yes	yes		2 6.6402E-14	202.96
WFHN(de)ESIIPHQDANYVIQSAR	2524.2248	IPI0016287€	IPI0016287€	yes	yes		3 0.0001001	152.01
WECKN(de)DTIFGIK	1509.7286	IPI0012618€	IPI0012618€	yes	yes	2,3	0.0036778	145.31
WASVVVPIGKEQN(de)YTCR	2006.0044	IPI0010999€	IPI0010999€	yes	no	2,3	0.0001556	154.51
WASVVVPIGKEQN(de)YTCHVYHEGIPEPITIR	3491.766	IPI01026927	IPI01026927	yes	no	3,4	1.7982E-06	107.88
WAAVVVPIGKEQN(de)YTCHVHHK	2472.2485	IPI00850057	IPI00850057	yes	no	2,3,4	1.4075E-05	179.14
VYVYAVN(de)QTR	1211.6299	IPI00466371	IPI01026704	no	no		2 4.1391E-15	198.25
VYTYADTPNDFQISN(de)FSIPEEDTKIKIPIIHQAIAK	4048.0833	IPI00108811	IPI00108811	yes	yes		4 3.2125E-07	85.185
VYTYADTPNDFQISN(de)FSIPEEDTKIK	3034.4448	IPI00108811	IPI00108811	yes	yes		3 1.327E-09	138.04
VYTYADTPNDFQISN(de)FSIPEEDTK	2793.2657	IPI00108811	IPI00108811	yes	yes		3 0.0016084	86.557
VYTVSSSPSCYMYVVVN(de)TTEVAIEQDIAYIQEIK	3962.8846	IPI00136012	IPI00136012	yes	yes		4 0.0005156	66.501
VYSIPGREN(de)YSSVDANGIQSQMISR	2770.3344	IPI0012710€	IPI0012710€	yes	yes		3 7.0241E-08	168.68
VYMKN(de)VTVVIR	1320.7588	IPI0046921€	IPI0046921€	yes	yes	2,3	7.7034E-05	164.33
VYIN(de)DSVEISRNEK	1778.8799	IPI0012676€	IPI0012676€	yes	yes		2 4.8912E-63	250.52
VYIN(de)DSVEISR	1293.6565	IPI0012676€	IPI0012676€	yes	yes		2 1.1687E-08	182.71
VYIHPFHIIYHN(de)K	1679.8936	IPI0065406€	IPI0065406€	yes	yes	2,3	1.6694E-09	176.48
VYHQAGYIN(de)FSITDDMIPHDSGIR	2748.2966	IPI0012606€	IPI0012606€	yes	no		3 1.1337E-06	135.49
VYGQNNIN(de)ETWSR	1579.7379	IPI0076260€	IPI0076260€	yes	no		2 6.8972E-06	164.68
VYGGIVN(de)QSEINEGTAFRR	2100.0276	IPI0041628€	IPI0041628€	yes	yes		2 1.211E-62	250.47
VWPDYPN(de)ITVDPSIGWDHQVEQYR	2913.3722	IPI0084869€	IPI0084869€	yes	yes		3 0.0023479	81.016
VWPDGVIPFVIGGN(de)FTGSQR	2145.1007	IPI0012518€	IPI0012518€	yes	no	2,3	4.1423E-05	162.59
VWN(de)STFIEDYKDFDR	1933.8846	IPI00468674	IPI00468674	yes	no	2,3	2.5815E-14	194.77
VWN(de)QTEQEPAAAYHIISICFVR	2560.2533	IPI0012907€	IPI0012907€	yes	no		3 0.0001347	120.9
VVSVDISFRPIN(de)ETFPVVYIETPKR	2904.5749	IPI0062466€	IPI0062466€	yes	yes	3,4	1.728E-23	205.78
VVSVDISFRPIN(de)ETFPVVYIETPK	2748.4738	IPI0062466€	IPI0062466€	yes	yes		3 2.018E-05	118.37
VVRPDESEIGERPPEDN(de)QSFQYDHEAFIGK	3358.5854	IPI00137831	IPI00137831	yes	yes		3 2.7618E-05	85.423
VVMDIPYEIWN(de)ETSAEVADIKK	2549.2723	IPI0011903€	IPI0011903€	yes	no	2,4	2.8268E-06	172.81
VVMDIPYEIWN(de)ETSAEVADIK	2421.1774	IPI0011903€	IPI0011903€	yes	no	2,3	5.5208E-28	218.72
VVIISGVEPRPPTQVQFTIN(de)ASSEDHKR	3200.6942	IPI0012297€	IPI0012297€	yes	no		3 4.0449E-14	151.42
VVIHPN(de)HSVVDIGIHK	1739.0094	IPI0040914€	IPI0040914€	yes	yes	2,3,4	9.6707E-28	219.35
VVIGEN(de)ITSNCPEVIYEIKEETPVFYK	3169.5893	IPI0067425€	IPI0067425€	yes	yes		3 4.5901E-06	113.42
VVIAGSN(de)MTICCMSPTK	1867.8664	IPI0011929€	IPI0011929€	yes	no		2 7.2615E-20	210.39
VVFISPAVPEEPEAYN(de)ITVIIR	2455.3363	IPI0040574€	IPI0040574€	yes	no	2,3	6.2272E-05	162.65
VVDGEREN(de)VSMVDYAHNNYQAQSAVPIR	3160.4996	IPI0013474€	IPI0013474€	yes	yes		3 1.9844E-05	102.21
VVAVSPAN(de)ISREER	1525.8213	IPI0022999€	IPI0022999€	yes	yes		2 0.020367	97.69
VTVEGMEYVFYFN(de)DTK	1793.8182	IPI0040574€	IPI0040574€	yes	no		2 4.2928E-07	171.81
VTTCHIPQQN(de)ATIYK	1772.888	IPI00410951	IPI00410951	yes	no		2 0.024074	85.909
VTQIHIISSIEHFQPDQDIIN(de)ISNASIGIHFR	3754.9795	IPI0013556€	IPI0013556€	yes	no		4 1.2555E-09	99.536
VTNSNANAAGPIIVAGYN(de)VSGSVR	2330.1979	IPI0022242€	IPI0022242€	yes	yes		2 2.3746E-21	204.53
VTNIMTGQTAN(de)ATSIIGTMTDAFPK	2582.272	IPI00923031	IPI00923031	yes	no		3 0.016616	53.304
VTITFATDESGN(de)HTGWK	1862.8799	IPI0046706€	IPI0046706€	yes	no		2 3.7402E-06	181.51

VTINNWWAN(de)KTEGR	1600.8322	IPI00136642	IPI00136642	yes	yes	2,3	5.4168E-21	207.52
VTIIPN(de)QTHYVVPK	1607.9035	IPI00742414	IPI00742414	yes	no		2 0.0013149	133.16
VTIDFN(de)ITNPENGPVIDDAIPNSVHGHIPFAK	3440.7365	IPI00466371	IPI00466371	yes	yes		3 6.4407E-15	127.3
VTIDFN(de)ITDPENGPVIDDAIPNSVHGHIPFAK	3441.7205	IPI01026704	IPI01026704	yes	yes	3,4	1.3419E-28	194.33
VSTVTIVSATSTTAN(de)MTMSPEGR	2340.1301	IPI00406603	IPI00406603	yes	yes		2 1.6039E-98	273.42
VSTIYANN(de)GSVIQGSTVASVYHKR	2550.319	IPI00121114	IPI00121114	yes	yes		3 0.010031	72.644
VSTIYANN(de)GSVIQGSTVASVYHK	2394.2179	IPI00121114	IPI00121114	yes	yes	2,3	1.0421E-26	338.24
VSQVIHEGGHN(de)VTKIYESANIPDFRK	3050.5938	IPI00463764	IPI00463764	yes	no	3,4	0.0002296	106.58
VSQVIHEGGHN(de)VTKIYESANIPDFR	2922.4988	IPI00463764	IPI00463764	yes	no		3 9.2514E-09	128.12
VSQVIHEGGHN(de)VTK	1503.7794	IPI00463764	IPI00463764	yes	no	2,3	1.9059E-50	240.46
VSNGN(de)GSIEIPATVPGYVHSAIHQHGIIQDPYYR	3688.8386	IPI00118011	IPI00118011	yes	no		4 0.0038814	57.156
VSITN(de)VSISDEGR	1375.6943	IPI00856723	IPI00856723	yes	no		2 1.4006E-65	246.64
VSIQEIPEGSEHIEMIAN(de)ATTIAYIKR	2883.5164	IPI00124428	IPI00124428	yes	yes		3 0.0036703	72.916
VSIQEIPEGSEHIEMIAN(de)ATTIAYIK	2727.4153	IPI00124428	IPI00124428	yes	yes	2,3,4	1.2256E-07	160.88
VSHVIN(de)DTHMK	1279.6343	IPI00674258	IPI00674258	yes	yes		2 0.016273	100.55
VSGQMhMQN(de)ITFQTEASVAQKEFK	2995.4168	IPI00312711	IPI00312711	yes	no		3 0.0001721	98.002
VSGQMhMQN(de)ITFQTEASVAQKEK	2591.2108	IPI00312711	IPI00312711	yes	no		3 2.034E-06	155.86
VSFYFFVTSPQN(de)VSDVIPR	2201.1157	IPI00153202	IPI00153202	yes	no	2,3	0.0005698	120.66
VSESEKSQIVN(de)ETHWQYYGTSOTR	2843.2998	IPI00749658	IPI00749658	yes	no		3 1.4006E-06	173.43
VRIDPPC(de)TNTTAPSNIINPYVR	2661.2969	IPI00658538	IPI00658538	yes	no		3 1.64E-05	159.95
VQPIVAVADEGWYIIQN(de)K	2042.0837	IPI00111163	IPI00111163	yes	no	2,3	2.8254E-08	187
VQPIASSTIHSITSVYGTVMN(de)R	2687.3953	IPI00674258	IPI00674258	yes	yes		3 0.016384	61.616
VQPFN(de)VTK	931.51272	IPI00222967	IPI00222967	yes	no		2 0.021732	134.26
VQGGSSVWGSVITHN(de)SSAITQSWGR	2763.3365	IPI00453977	IPI00453977	yes	no	3,4	1.7884E-06	119.34
VPNNAIEGIEN(de)ITAIYIHHNEIQEVGSSMR	3347.6568	IPI00120187	IPI00120187	yes	yes	3,4	8.8861E-13	132.24
VPMMVQSGN(de)ISYFR	1627.7851	IPI00116108	IPI00116108	yes	yes		2 0.0036745	101.75
VNYEGGTWDWIAEAISSN(de)HTR	2405.1036	IPI00134588	IPI00134588	yes	yes		3 0.0001152	122.01
VNRFN(de)STEYQVVTR	1711.8642	IPI00119063	IPI00119063	yes	no	2,3	3.6772E-39	232.53
VNNVTGN(de)FTFVIR	1479.7834	IPI00395208	IPI00395208	yes	no		2 0.0010959	146.96
VNN(de)VTGNFTFVIR	1479.7834	IPI00395208	IPI00395208	yes	no		2 0.0010959	146.96
VNDSVPFHIGWN(de)STER	1856.8806	IPI00464258	IPI00464258	yes	yes		2 0.0006438	140.22
VNDNK(de)TAAEEAIR	1429.7161	IPI00400018	IPI00400018	yes	no		2 0.0055566	116.63
VNCEERNVTGIEN(de)FTIK	2021.984	IPI00378224	IPI00378224	yes	yes		2 4.5809E-05	173.03
VNCEERN(de)VTGIENFTIK	2021.984	IPI00378224	IPI00378224	yes	yes		2 4.5809E-05	173.03
VNASTTDPN(de)STVEQSAITR	1989.9603	IPI00338788	IPI00338788	yes	no		2 7.536E-38	231.86
VN(de)YTRAEEIFSR	1483.7419	IPI00131168	IPI00131168	yes	yes		2 0.019809	98.902
VN(de)SSIHSQISR	1226.6367	IPI00400018	IPI00400018	yes	no		2 1.6816E-13	286.93
VN(de)KTEEDYARDSIFVR	1940.9592	IPI00133103	IPI00133103	yes	no		2 0.0004276	161.04
VN(de)ITYNYPVR	1237.6455	IPI00221858	IPI00221858	yes	yes		2 7.4157E-06	176.95
VN(de)ITVIPSITSR	1298.7558	IPI00323857	IPI00323857	yes	no		2 0.0021966	143.25
VN(de)ISFPSAQSIASDTHIK	2011.0375	IPI00624663	IPI00624663	yes	yes	2,3	3.3229E-05	175.8
VN(de)ISAPIPKEDPIFTYISKR	2400.3417	IPI00761772	IPI00761772	yes	no		3 0.0077098	99.092
VN(de)ISAPIPKEDPIFTYISK	2244.2406	IPI00761772	IPI00761772	yes	no		3 0.0085202	93.226
VN(de)GTKEPIEFK	1260.6714	IPI00345112	IPI00345112	yes	no		2 7.6285E-17	196.88
VN(de)GTITQVIIVGAPTHDDVSK	2163.1535	IPI00225718	IPI00225718	yes	yes	2,3	0.0001076	129.32
VN(de)GSCVDVDECATGGR	1694.6988	IPI00170218	IPI00170218	yes	no		2 0.0077762	100.77
VN(de)FTIEASEGCYR	1544.6929	IPI00342158	IPI00342158	yes	no		2 0.0013313	134.21
VN(de)DSVPFHIGWNSTER	1856.8806	IPI00464258	IPI00464258	yes	yes		2 0.0006438	140.22
VN(de)ASTTDPNSTVEQSAITR	1989.9603	IPI00338788	IPI00338788	yes	no		2 7.536E-38	231.86
VMSWWDYGYQITAMAN(de)R	2090.9343	IPI00109108	IPI00109108	yes	yes	2,3	3.3136E-41	216.29
VMSWWDYGYQIAGMAN(de)R	2046.908	IPI00316468	IPI00316468	yes	yes	2,3	8.9049E-20	209.66
VMEIEKEIAN(de)ATTKPEDR	2073.0412	IPI00461861	IPI00461861	yes	yes		2 0.012632	107.72
VME(de)VNFIYVVMSTAAIPMIKQSNISIAVISSIAGK	3754.9712	IPI00115598	IPI00115598	yes	no		4 0.016235	43.831
VKPTPPYN(de)ISVTNSEEISSIK	2415.2897	IPI00120158	IPI00120158	yes	yes		3 2.6514E-05	121.63
VKN(de)STCIDDSWIHPK	1798.8672	IPI00122584	IPI00122584	yes	yes		2 0.0075164	110.38
VIYIPAYN(de)CTIRPVSK	1893.0182	IPI00469387	IPI00469387	yes	no		2 0.010975	103.61
VIVIITDGEASDKGN(de)ISAAHDITR	2494.3027	IPI00894972	IPI00894972	yes	no		3 0.0026135	87.772
VITNQESPYQN(de)HTGR	1742.8336	IPI00125318	IPI00125318	yes	no	2,3	6.8101E-79	263.56
VITMANQVITVN(de)ISEEGR	1973.0252	IPI00987268	IPI00987268	yes	yes	2,3	4.4106E-19	205.78
VITIAN(de)FTTK	1106.6336	IPI00109727	IPI00109727	yes	yes		2 0.0007338	164.65
VISNN(de)CTSYGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes		2 0.0009735	137.81
VISN(de)NCTSYGVIDIGK	1738.856	IPI00331214	IPI00331214	yes	yes		2 0.0009735	137.81
VISIAQAHSIN(de)FSCEQVR	2058.0317	IPI00308998	IPI00308998	yes	yes	2,3	0.0001722	145.91
VIPSIVNEVIKSVVAKFN(de)ASQIITQR	2852.6488	IPI00321718	IPI00321718	yes	no		3 5.3314E-23	174.01
VIPFN(de)VTDYCQIVR	1722.8763	IPI00828222	IPI00828222	yes	no		2 0.0055272	107.61
VINN(de)ITNDIR	1170.6357	IPI00128178	IPI00128178	yes	no		2 3.5923E-121	275.84
VINEECKEN(de)ESINIAAR	1987.9633	IPI00122411	IPI00122411	yes	yes		3 0.0004525	144.29
VINDTWAWKN(de)ATIAEQAK	2058.0534	IPI00123342	IPI00123342	yes	yes	2,3	1.1347E-78	264.03
VINADQGT SATVQMIIN(de)DTCPFIVR	2762.3731	IPI00320068	IPI00320068	yes	yes		3 1.0193E-08	127.35
VIN(de)STGHVAR	1167.5996	IPI00849148	IPI00849148	yes	no		2 0.022901	93.623
VIN(de)ITDNTYFK	1326.682	IPI00130117	IPI00130117	yes	yes		2 2.1129E-11	185.25
VIN(de)ISHSIIDISSEQIFDGIPAIQHINIQGNHFPK	3894.0428	IPI00343568	IPI00343568	yes	yes		4 0.0025517	57.745
VIN(de)DTWAWKNATIAEQAK	2058.0534	IPI00123342	IPI00123342	yes	yes	2,3	1.1347E-78	264.03
VIN(de)DTWAWK	1131.5713	IPI00123342	IPI00123342	yes	yes		2 0.0047021	151.22
VIKDAVNN(de)ITAK	1284.7402	IPI00626793	IPI00626793	yes	no		2 0.0039361	143.25
VIIRPYITPNNQGIYIFQGN(de)STVR	2762.4868	IPI00319508	IPI00319508	yes	yes	2,3,4	3.0347E-40	231.93
VIIQSQPIGTIKHN(de)MTYFCK	2490.3127	IPI00108003	IPI00108003	yes	no		3 0.0018697	102.58
VIINFFVGTDDKN(de)STQHIIHFDQPR	2940.4882	IPI00461861	IPI00461861	yes	no		3 0.0003103	106.42
VIIN(de)ITTVAAANHGTYK	1713.9414	IPI00467608	IPI00467608	yes	no		2 9.6934E-20	209.6
VIIIDPAISGN(de)ETEPYPAFTR	2415.2686	IPI00848693	IPI00848693	yes	yes		2 2.3984E-14	197
VIHIQFNSISSITDDTFCAN(de)DTR	2781.3392	IPI00120848	IPI00120848	yes	yes		3 0.000104	111.66
VIFYKDDAMVYN(de)VTSR	1919.9451	IPI00406901	IPI00406901	yes	no	2,3	0.0001565	157.86
VIETIPANYSIN(de)SSKK	1762.9465	IPI00480532	IPI00480532	yes	no		2 0.023899	93.478
VIETIPAN(de)YSINSSKK	1762.9465	IPI00480532	IPI00480532	yes	no		2 0.023899	93.478
VIENEKFDTHEYHN(de)ESR	2145.9716	IPI00463492	IPI00463492	yes	yes	2,3	5.0475E-19	207.92
VIEEPKN(de)VSCETR	1559.7614	IPI00118291	IPI00118291	yes	no		2 0.0091086	109.44

VIEEFYN(de)QTNWHR	1734.8114	IPI00308691	IPI00308691	yes	no		2	2.4065E-80	257.76
VIDPDFHENYFEQYMDHFNESFGN(de)KTFGQR	3857.6845	IPI0033155C	IPI0033155C	yes	yes		4	0.0096288	59.628
VIDIWDAQSAN(de)FTEKEIESFREEIK	3109.5608	IPI00469307	IPI00469307	yes	no		3	0.0011839	89.663
VIDIWDAQSAN(de)FTEK	1848.9258	IPI00469307	IPI00469307	yes	no	2,3		0.0001178	163.99
VIAQHQNIIIFAN(de)SSSSMR	2002.0054	IPI0031904C	IPI0031904C	yes	no	2,3		0.004768	101.42
VHSGN(de)FSTIPQYFK	1623.8045	IPI01023131	IPI01023131	yes	no		2	0.018613	90.444
VHITVCN(de)ITSR	1298.6765	IPI00128862	IPI00128862	yes	no		2	0.004449	122.7
VHGPN(de)ASHYTSIMTMITWER	2330.0936	IPI00169617	IPI00169617	yes	yes		3	4.5705E-05	147.09
VGYQSQN(de)ISCFRR	1604.7406	IPI0046425E	IPI0046425E	yes	yes		2	1.6243E-52	236.28
VGVNKN(de)QTVTATFGYPFR	1998.0323	IPI0011425E	IPI0011425E	yes	no	2,3		9.4205E-62	246.12
VGNVECGEGHFCHDN(de)QTCK	2406.9198	IPI0012464C	IPI0012464C	yes	yes		3	0.026701	70.334
VGN(de)NTVHVHQEVHK	1596.8121	IPI00131904	IPI00131904	yes	yes		2	0.020113	89.46
VGDEYQEIQIDGFDN(de)ESSNKTWMK	2832.2549	IPI00114671	IPI00114671	yes	no		3	1.7707E-06	136.58
VGATAAVYSAAIIEYITAEVIEIAGN(de)ASK	2894.5277	IPI0055505E	IPI0055505E	yes	no		3	2.0608E-89	258.31
VGAPEN(de)VTVQAHGHTAFTDITVSVK	2593.2772	IPI0040554E	IPI0040554E	yes	yes		3	0.02367	58.093
VFVYTPPTN(de)YTIR	1573.814	IPI0012442E	IPI0012442E	yes	yes		2	3.9692E-10	181.66
VFPYISVMVNN(de)GSISYDHSKDGR	2584.238	IPI00321634	IPI00321634	yes	yes	2,3		9.9123E-06	150.68
VFPYISVMVNN(de)GSISYDHSK	2256.0885	IPI00321634	IPI00321634	yes	yes	2,3		1.2614E-05	180.31
VFPYISAMVNN(de)GSISYDHER	2298.0739	IPI0083035E	IPI0083035E	yes	no		2	0.0029694	98.816
VFNGKDN(de)ISK	1120.5877	IPI00331214	IPI00331214	yes	yes		2	1.9321E-05	174.4
VFKTN(de)STQVSDVR	1479.7682	IPI0046942E	IPI0046942E	yes	no		2	0.0041444	119.96
VFKPQSGADAIN(de)DSQDFPFPEPAK	2705.2973	IPI0046246E	IPI0046246E	yes	no		3	0.0011846	83.31
VFIVPVGN(de)HSNIPFSR	1781.9577	IPI0022141E	IPI0022141E	yes	no	2,3		8.9441E-05	159.18
VFHIHN(de)ESWVIITPK	1818.9781	IPI00224752	IPI00224752	yes	yes		2	6.9009E-15	199.31
VFGSQN(de)ITTVK	1192.6452	IPI00123342	IPI00123342	yes	yes		2	8.371E-57	240.85
VFDIHNMGSVN(de)VSVGCTPAQIETSR	2958.4328	IPI0011691E	IPI0011691E	yes	no		3	1.7305E-06	117.22
VETGVKPGMVVTFAPVN(de)VTTEVK	2514.3767	IPI00307837	IPI00307837	yes	yes		3	0.0087711	76.015
VEFDDKGNVITSYGNPIIIN(de)SSIPEDATIK	3248.6453	IPI00122257	IPI00122257	yes	no		3	3.5047E-14	140.26
VDVIVAN(de)ITVTDKQDQHTPAWNAAYR	2893.4723	IPI00323134	IPI00323134	yes	no		3	1.0189E-12	189.82
VDIPQQPMGIIAVANDTN(de)SCEISPCR	2884.3517	IPI0011906E	IPI0011906E	yes	yes		3	0.0002154	102.21
VDIEDFEN(de)NTAYAK	1627.7366	IPI0055116E	IPI0055116E	yes	no		2	9.3057E-39	228.03
VDFIWHPEVN(de)GSMK	1657.7923	IPI0038029E	IPI0038029E	yes	yes		2	0.0084592	102.73
VDDEMPQHAVISGPNIFINNINKTDN(de)GTYR	3371.6205	IPI0085672E	IPI0085672E	yes	no	3,4		3.1201E-12	161.22
VDDEMPQHAVISGPNIFINNIN(de)KTDNGTYR	3371.6205	IPI0085672E	IPI0085672E	yes	no	3,4		3.1201E-12	161.22
VCSNDN(de)KTFDSSCHFFATK	2263.9627	IPI0012634E	IPI0012634E	yes	no		3	0.0055482	100.04
VCNGIG(de)IGEFKDTISINATNIK	2363.2155	IPI0012119C	IPI0012119C	yes	no		3	0.0055462	92.492
VCNG(de)IGIGEFKDTISINATNIK	2363.2155	IPI0012119C	IPI0012119C	yes	no		3	0.0055462	92.492
VAQPGINYAIGTN(de)TSYPNNIIR	2375.2234	IPI0022636C	IPI0022636C	yes	no	2,3		2.8336E-09	177.44
VAEVENGTKPDSDVPEHCIDTWSFDAATMDHN(de)GTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes	4,5		1.7298E-10	91.115
VAEVEN(de)GTKPDSDVPEHCIDTWSFDAATMDHNGTMIFFK	4410.9508	IPI00128484	IPI00128484	yes	yes	4,5		1.7298E-10	91.115
TV(de)VTEAGNIKDNATQEEIIHYIEK	2827.4604	IPI0032119C	IPI0032119C	yes	no		3	7.6664E-06	117.38
TSDTGEEEEAITN(de)STEANGK	1952.8447	IPI0040849E	IPI0040849E	yes	no		2	1.6651E-27	218.37
TQITCSIN(de)SSGVDIVGHR	1942.9531	IPI0040849E	IPI0040849E	yes	no	2,3		0.0003357	158.92
TN(de)SSFIQGFVDHVK	1577.7838	IPI0032119C	IPI0032119C	yes	no		2	0.037605	79.771
TIYN(de)WSGYPIIVHK	1689.8879	IPI00471081	IPI00471081	yes	yes		2	2.8331E-15	199.13
TITIIN(de)VTR	1029.6182	IPI0010853E	IPI0010853E	yes	no		2	0.0069093	140.49
TIIGYYN(de)QSAGGTHTIQWMYGCDVGS DGR	3206.4186	IPI0010999E	IPI0010999E	yes	yes		3	4.5278E-06	91.722
TIGISPFHEFADVFTAN(de)DSGHR	2516.2084	IPI0012756C	IPI0012756C	yes	yes		3	4.5869E-06	127.59
TGRVYN(de)VTQHAMIIVNKQVK	2355.2845	IPI0046819E	IPI0046819E	yes	no		3	0.0009363	108.18
TAASIIWQAYPIIN(de)ISEK	2017.0884	IPI00115867	IPI00115867	yes	yes	2,3		1.4387E-49	243.01
STIIHHPQYAWIQDIGIRENEG VYN(de)GSWGR	3780.8397	IPI00230084	IPI00230084	yes	no		4	1.3996E-19	143.25
SN(de)VTRPSEFNWIWIPIPIK	2491.3264	IPI0031950E	IPI0031950E	yes	no		3	0.0025674	100.77
SIIDHIHVGVRDN(de)VSQPK	2070.097	IPI0012342E	IPI0012342E	yes	no	2,3		0.0022178	110.56
SIAQYIHSGPPVYFVIEEGYN(de)YSSR	2875.3817	IPI0013260C	IPI0013260C	yes	no		3	0.0003017	90.884
SFIISIAAIHDN(de)HTHSDIQVK	2345.2128	IPI00130624	IPI00130624	yes	yes		3	9.708E-05	136.34
RYIKNG(de)NATIIR	1417.8154	IPI0098582E	IPI0098582E	yes	no	2,3		0.0059853	136.38
RYIK(de)NGNATIIR	1417.8154	IPI0098582E	IPI0098582E	yes	no	2,3		0.0059853	136.38
RYIEIG(de)NETIIR	1475.8096	IPI00850057	IPI00850057	yes	no	2,3		9.9537E-26	212.9
RVNDN(de)KTAAEEAIR	1585.8172	IPI0040001E	IPI0040001E	yes	no		2	6.2469E-15	201.06
RVM(de)EVNFISYVVMSTAAIPMIKQSN GSI AVISSIAGK	3911.0723	IPI0011559E	IPI0011559E	yes	no		4	0.0013988	57.076
RVIIYPAY(de)NCTIRPVSK	2049.1194	IPI00469387	IPI00469387	yes	no	2,3		0.0002355	168.1
RV(de)NYTRAEEIFSR	1639.8431	IPI0013116E	IPI0013116E	yes	yes		2	0.013461	115.34
RSN(de)FTPATNEAPQATVFPK	2075.0436	IPI0017203E	IPI0017203E	yes	no	2,3		0.0015493	115.87
RQDVN(de)ITVATVPTWIR	1868.0268	IPI0022258E	IPI0022258E	yes	yes		2	0.0015544	138.39
RQDPVSWN(de)KTFEDISR	1976.9704	IPI0084869E	IPI0084869E	yes	yes	2,3		0.0007861	145.86
RPYIVPIIWIN(de)ETGTIGDEKAEMFK	2919.5205	IPI00331214	IPI00331214	yes	yes		3	3.7248E-07	155.25
RPYIVPIIWIN(de)ETGTIGDEK	2313.2369	IPI00331214	IPI00331214	yes	yes		3	0.000765	115.87
RPFVVYEMEVDTIETTCHAI DPTPIAN(de)CSV R	3676.7324	IPI0012824E	IPI0012824E	yes	yes	3,4		3.8486E-09	96.387
RNPSANTFIHIN(de)ASSFR	1930.9762	IPI0031553E	IPI0031553E	yes	yes	2,3		1.3609E-05	179.81
RNESHVVSISTAN(de)FTSPVIEFWER	2891.3991	IPI00314054	IPI00314054	yes	yes		3	8.0457E-06	171.06
RN(de)WTINRINGDFAQINIK	2172.1552	IPI00323134	IPI00323134	yes	no		3	0.0029545	138.57
RN(de)FTAADWGHSR	1416.6647	IPI0033988E	IPI0033988E	yes	no	2,3		0.0022909	129.54
RN(de)ESHVVSISTANFTSPVIEFWER	2891.3991	IPI00314054	IPI00314054	yes	yes		3	8.0457E-06	171.06
RMHIN(de)GSNVQVIHR	1659.874	IPI0011906E	IPI0011906E	yes	yes		3	7.3463E-21	206.18
RIYAGMVSIMDEAVGN(de)VTK	2053.0336	IPI0065235E	IPI0065235E	yes	no		2	0.043796	64.298
RIPVTN(de)ISQIHK	1404.8201	IPI0046942E	IPI0046942E	yes	no		3	0.0029409	137.84
RIPPTN(de)FTR	1100.6091	IPI0032061E	IPI0032061E	yes	yes		2	0.017449	133.13
RIGAI(de)NNSIIIEDR	1695.9632	IPI0011551E	IPI0011551E	yes	no		3	0.0018791	126.63
RIFPSGN(de)VTSVIEISSNPAHR	2280.1975	IPI0079846E	IPI0079846E	yes	no		3	0.0069567	92.897
RHEEGHMIN(de)CTCFGQGR	2087.8836	IPI0011353E	IPI0011353E	yes	no	2,3		0.012767	101.01
RGVFITN(de)ETGQPIIGK	1728.9523	IPI0011196C	IPI0011196C	yes	no	2,3		0.0001634	166.3
RGFTDCAIAN(de)MTQQIR	1981.9462	IPI00621027	IPI00621027	yes	no	2,3		0.0002696	156.57
RGPECSQN(de)YTAPTGVIK	1876.9101	IPI0012399E	IPI0012399E	yes	yes	2,3		0.0002738	157.58
RGDDIYTN(de)VTVSIVEAIVGFEMDITHIDGHK	3443.7031	IPI00320241	IPI00320241	yes	yes	3,4,5		4.7885E-14	173.36
RGCKDN(de)ATDSVPIR	1587.7787	IPI0011906E	IPI0011906E	yes	yes		2	0.023466	106.52
RFHSDIN(de)ISESIIPAVIEK	2167.1637	IPI00831484	IPI00831484	yes	yes		3	6.4392E-08	186.72

RDQGN(de)VTDMASMK	1451.6497	IPI00471081	IPI00471081	yes	yes	2,3	0.0010871	132.79
RDDYRPTWTI(de)NQTEPVAGNYYPVNTN	3125.4955	IPI00381303	IPI00381303	yes	yes		3 3.9104E-08	160.2
RDDIHPTIPAGQYFI(de)NITYNYPVHVSFDGR	3405.6531	IPI00387318	IPI00387318	yes	no	3,4	8.4627E-12	275.54
RAN(de)ASTFAVPSPVNSADTR	2047.0083	IPI00119065	IPI00119065	yes	yes	2,3	0.007435	94.845
RAEDYGPVEVISHWHPN(de)ITINIVDDHTPWVK	3636.8114	IPI00121627	IPI00121627	yes	yes		4 1.3908E-13	101.73
RADIN(de)GSNMETVIGHGK	1910.9632	IPI00411145	IPI00411145	yes	no		3 0.0046507	111.33
QVN(de)GSVSGSQWNK	1389.6637	IPI0040885C	IPI0040885C	yes	yes		2 0.0031303	116.51
QVEIIEYPYHEQIAVVAPEIITGHN(de)YTIK	3463.8028	IPI00223987	IPI00223987	yes	yes	3,4	4.8495E-15	164.82
QVEEIVN(de)HTGIR	1506.8154	IPI00263041	IPI00263041	yes	yes		2 0.0012981	143.94
QVAIQTFGN(de)QTSIIPAGGAGYK	2220.1539	IPI00228719	IPI00228719	yes	yes	2,3	9.621E-159	299.69
QTTAMDFSAN(de)ETVCWVHVGDSSAAQTQIK	3257.4758	IPI00119063	IPI00119063	yes	no		3 0.0036047	65.213
QTQVGIVQYGAN(de)VTHEFNINK	2359.1921	IPI00466371	IPI01026704	no	no	2,3	4.9216E-13	193.85
QSQPVHIIPMN(de)ETDHINMVFSNK	2678.2945	IPI0013350C	IPI0013350C	yes	yes		3 0.025072	56.327
QSN(de)GSIIVISSIAGK	1430.7729	IPI00115599	IPI00115599	yes	no		2 1.6909E-38	229.68
QSINTVN(de)DTVWK	1403.7045	IPI00420867	IPI00420867	yes	yes		2 0.0064483	105.65
QRYN(de)ITAK	992.54033	IPI00130661	IPI00130661	yes	yes		2 5.3683E-30	219.51
QQCIEEAQIEN(de)ETTGCCK	2123.9099	IPI00128984	IPI00128984	yes	yes		2 5.1988E-62	246.21
QPIYIN(de)CSCVTGGSASAK	1911.8819	IPI00309249	IPI00309249	yes	yes		2 0.0001746	145.43
QNFSN(de)ITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2 3.043E-260	338.8
QN(de)FSNITVSTEDQVK	1708.8268	IPI00129677	IPI00129677	yes	no		2 3.043E-260	338.8
QKNVNISYI(de)VNDSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	2,3	0.0002739	175.8
QKN(de)VNISYIVNDSFFPQRPEK	2522.2918	IPI00122557	IPI00122557	yes	no	2,3	0.0002739	175.8
QINN(de)VSAMIVIAR	1427.7919	IPI00944049	IPI00944049	yes	no		2 0.0009616	130.56
QIN(de)ITTEDDDIYHMTVPYGRPR	2633.2544	IPI00265291	IPI00265291	yes	yes		3 0.0077777	88.19
QIITEEKIPN(de)NTQWITWSPEGHK	2748.3871	IPI00125813	IPI00125813	yes	no	2,3	8.4295E-52	242.59
QIIAN(de)NSIR	1140.6615	IPI00128024	IPI00128024	yes	yes		2 0.014411	110.53
QIIAN(de)SSAIEETIIGHQGR	2036.0651	IPI00116913	IPI00116913	yes	no	2,3	0.0015106	131.67
QIGASPSDDIIFGVFAQSKPDSAEPVN(de)R	2944.4567	IPI0013042C	IPI0013042C	yes	no		4 3.2916E-14	129.9
QIFFN(de)GTETIR	1324.6776	IPI00338209	IPI00338209	yes	no		2 0.014852	100.04
QHGQFSIIVGIN(de)ITSIGIR	2109.1695	IPI0012119C	IPI0012119C	yes	no		3 0.000263	158.64
QGPQAGGTTITIN(de)GTHIDTGSKEDVR	2652.3103	IPI00405742	IPI00405742	yes	no	2,3	6.0153E-06	116.43
QGPQAGGTTITIN(de)GTHIDTGSK	2153.0713	IPI00405742	IPI00405742	yes	no	2,3	0.0001909	117.48
QGDQYSCMVGHEAIPMN(de)FTQK	2440.061	IPI00968978	IPI00968978	yes	no	2,3	4.8198E-05	125.73
QFWIFDVQNPDDVAKN(de)SSK	2237.0753	IPI00331214	IPI00331214	yes	yes	2,3	1.4403E-12	197.67
QFNCSFEN(de)ITR	1414.6299	IPI00674255	IPI00674255	yes	yes		2 0.0053084	117.79
QFN(de)CSFENITR	1414.6299	IPI00674255	IPI00674255	yes	yes		2 0.0053084	117.79
QENNIINAIEHGNSSIFIEN(de)STFESFGYHSVSPDR	4064.9141	IPI00125813	IPI00125813	yes	no		4 0.018637	45.685
QENNIINAIEHGN(de)SSIFIENSTFESFGYHSVSPDR	4064.9141	IPI00125813	IPI00125813	yes	no		4 0.018637	45.685
QEMNGTYVCHAFSSHGN(de)VTR	2293.9957	IPI00122973	IPI00122973	yes	no		3 0.014728	68.243
QDIAISGN(de)ISSIYAMTQDK	2053.999	IPI00405742	IPI00405742	yes	no	2,3	2.0348E-19	208.37
QAIQTMQSEFFYITNIN(de)DTIEIR	2988.4903	IPI0011813C	IPI0011813C	yes	yes		3 1.2407E-18	167.73
PSWGN(de)HTPIFR	1310.652	IPI00117312	IPI00117312	yes	yes		2 3.7829E-11	187.85
PINETFPVVYIE(de)TPKR	1902.0251	IPI00624663	IPI00624663	yes	yes	2,3	0.0001097	151.56
PINETFPVVYIE(de)TPK	1745.924	IPI00624663	IPI00624663	yes	yes		2 0.031176	106.82
PGAASN(de)ISFQAPFR	1461.7365	IPI00311159	IPI00311159	yes	yes		2 1.0425E-10	186.56
PFFIIQN(de)SSMMK	1441.7098	IPI00226229	IPI00226229	yes	no		2 0.018297	81.625
NYTAN(de)ATSSREEAWDYVQAQVK	2530.1724	IPI0010809E	IPI0010809E	yes	no		3 3.8605E-06	175.8
NYTAN(de)ATSSREEAWDYVQAQVK	2530.1724	IPI0010809E	IPI0010809E	yes	no		3 3.8605E-06	175.8
NYN(de)FTIACNTR	1500.7143	IPI00322575	IPI00322575	yes	no		2 0.0026052	127.17
NYN(de)FTIACNTR	1344.6132	IPI00322575	IPI00322575	yes	no		2 0.000637	156.36
NYKNPN(de)ITISFTAER	1766.8951	IPI0013260C	IPI0013260C	yes	no	2,3	4.9746E-08	157.56
NYFHYN(de)QSFPPSYNIK	2017.9323	IPI00129265	IPI00129265	yes	yes		2 7.8109E-48	205.98
NYEVQIFHVN(de)ATVTEEGTGIEFSR	2739.314	IPI00123223	IPI00123223	yes	yes		3 2.3732E-06	124.86
NVVN(de)ITINDEAMVEAVAIYNPVSFAFEVTEDFIMYK	4166.0268	IPI00118987	IPI00118987	yes	yes		4 1.1042E-10	91.603
NVNISYTVN(de)DSFFPQRPKIANK	2792.461	IPI00381178	IPI00381178	yes	yes		3 0.0002921	111.18
NVNISYTVN(de)DSFFPQRPK	2253.1178	IPI00381178	IPI00381178	yes	yes	2,3	9.7631E-205	319.55
NVNISYIVN(de)DSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3	3.2743E-94	269.49
NVNI(de)SYTVNDSFFPQRPKIANK	2792.461	IPI00381178	IPI00381178	yes	yes		3 0.0002921	111.18
NVNI(de)SYTVNDSFFPQRPK	2253.1178	IPI00381178	IPI00381178	yes	yes	2,3	9.7631E-205	319.55
NVN(de)ISYIVNDSFFPQRPEK	2266.1382	IPI00122557	IPI00122557	yes	no	2,3	3.2743E-94	269.49
NVAIVAGDTGN(de)ATGIGEQGPTR	2097.0451	IPI00122272	IPI00122272	yes	no		2 6.1857E-98	273.33
NTQADVINASWSVISN(de)STRHEIER	2726.3372	IPI00132189	IPI00132189	yes	yes		3 2.4378E-06	132.74
NTQADVINASWSVISN(de)STR	2062.0079	IPI00132189	IPI00132189	yes	yes	2,3	0	370.36
NTQADVIN(de)ASWSVISNSTRHEIER	2726.3372	IPI00132189	IPI00132189	yes	yes		3 2.4378E-06	132.74
NTQADVIN(de)ASWSVISNSTR	2062.0079	IPI00132189	IPI00132189	yes	yes	2,3	0	370.36
NTGEIN(de)ITSIIDREETPYFIITGYAIDSR	3300.6514	IPI00115793	IPI00115793	yes	no		3 6.3269E-14	179.33
NSS(de)IGGVINKYDVIR	1732.9472	IPI00314673	IPI00314673	yes	yes		2 0.0001782	149.97
NSQFDMN(de)STDIAIK	1582.7297	IPI00346062	IPI00346062	yes	yes		2 0.0001274	155.57
NSNSN(de)VIQVDQSGIGIPSRDYINKTENEK	3381.6437	IPI0039684C	IPI0039684C	yes	no		3 1.5839E-07	115.11
NSAEN(de)QTHQTFITVEK	1845.8857	IPI00458077	IPI00458077	yes	yes		2 1.5651E-08	183.7
NRCDDN(de)DTIIVR	1488.7103	IPI0046760C	IPI0046760C	yes	yes		2 0.0019377	133.15
NQKDEIN(de)ETDIK	1445.6998	IPI00930882	IPI00930882	yes	no		2 0.0097888	109.15
NQIVEI(de)EKVVHPNHSVVDIGIHK	2692.5276	IPI00409148	IPI00409148	yes	yes		3 8.9427E-10	186.15
NPSANTFIHINA(de)SSFR	1774.8751	IPI00315535	IPI00315535	yes	yes		2 1.6649E-62	250.52
NPNN(de)NTIHPNIR	1402.7066	IPI00319509	IPI00319509	yes	no		2 5.5191E-34	223.31
NPIGQAQSAVVIN(de)VTER	1794.9588	IPI00119299	IPI00119299	yes	no		2 0.0018319	129.43
NPEDVQSPN(de)GSVYTWR	1847.8438	IPI00112614	IPI00112614	yes	yes		2 4.6354E-05	170.09
NPCTSEQN(de)CTSPFSYK	1918.7826	IPI00132474	IPI00132474	yes	yes		2 7.9507E-155	296.13
NPCNITREDY(de)APIVK	1788.8829	IPI00307966	IPI00307966	yes	yes		2 0.0002748	148.52
NNQT(de)ECFNHVR	1417.6157	IPI00124666	IPI00124666	yes	no		2 0.0010284	149.49
NNIHFPGHN(de)YTTR	1569.7437	IPI00130271	IPI00130271	yes	no		2 0.0023777	119.69
NMVIQN(de)GTK	1003.5121	IPI00127447	IPI00127447	yes	yes		2 0.010106	135.43
NMICQWDPGRETYIETN(de)YTIK	2631.2098	IPI00120155	IPI00120155	yes	yes		3 1.0367E-05	180.62
NKNPQMN(de)FTEANEACK	1894.8302	IPI00308245	IPI00308245	yes	yes	2,3	6.5912E-13	198.23
NKANIQFGEN(de)GTTISAVTNK	2106.0705	IPI00127447	IPI00127447	yes	yes	2,3	5.8504E-63	252.05
NITVIEPVTQPFIVQTN(de)TTVK	2341.2893	IPI00108535	IPI00108535	yes	no		2 2.3893E-29	223.46

NITAFN(de)ETIFR	1324.6776	IPI0012470C	IPI0012470C	yes	yes		2	4.9182E-44	224.66
NISTCFSSGDIFAAHN(de)ISER	2225.0171	IPI0012342E	IPI0012342E	yes	no		2	3.1105E-19	204.47
NISFACNPGFFIN(de)GTSSSK	2046.9469	IPI0032246C	IPI0032246C	yes	no		2	2.485E-62	247
NISFACNPG(de)FFINGTSSSK	2046.9469	IPI0032246C	IPI0032246C	yes	no		2	2.485E-62	247
NIQAVNEIATISQCN(de)DTSSAAMVQCIR	3106.4846	IPI0013834Z	IPI0013834Z	yes	no		4	0.0006064	72.935
NIPWYVIAGNHDHIGN(de)VSAQIAYSK	2766.3878	IPI0013749I	IPI0013749I	yes	yes		3	0.0015675	77.575
NIN(de)SSCRPHPGAWIR	1763.8638	IPI0022280E	IPI0022280E	yes	no	2,3		0.017012	100.22
NIMTIVHFYN(de)K	1378.7067	IPI0011982Z	IPI0011982Z	yes	no		2	0.0040741	127.87
NIMIDIQKDTAV(de)EGEEIEVNCTAMASKPATTIR	3647.7845	IPI0085672C	IPI0085672C	yes	no		4	1.3358E-11	118.9
NIKRPYIVPII(de)WINETGTIGDEK	2668.4588	IPI00331214	IPI00331214	yes	yes		3	1.4778E-09	157.85
NIIYHNIGIITKPGTIPTDRN(de)SSMCTVMR	3414.7574	IPI0046349Z	IPI0046349Z	yes	yes		4	8.5522E-06	84.68
NIINDYVSN(de)QTQGMKEIISEIDER	2921.4441	IPI0013183C	IPI0013183C	yes	no	3,4		2.4334E-09	180.13
NIINDYVSN(de)QTQGMK	1836.904	IPI0013183C	IPI0013183C	yes	no	2,3		2.1565E-15E	304.23
NIIGIDENFVIN(de)SSTEHR	2057.0178	IPI0040660C	IPI0040660C	yes	yes	2,3		0.000155	149.52
NIGN(de)TSEGPR	1043.4996	IPI0022170E	IPI0022170E	yes	yes		2	0.0018523	152.54
NIGGIETEDDYGYQGHVQTCN(de)FSAQMAK	3132.3553	IPI0012676E	IPI0012676E	yes	yes		3	1.8821E-11	142.79
NIFIN(de)HSETASAK	1430.7154	IPI0040914E	IPI0040914E	yes	yes	2,3		7.2418E-98	273.72
NHNGQGYKDQDPASFGNNSIIN(de)SSR	2832.3175	IPI0084869C	IPI0084869C	yes	yes		3	1.39E-05	114.92
NHNGQGYKDQDPASFGN(de)NSIINSSR	2832.3175	IPI0084869C	IPI0084869C	yes	yes		3	1.39E-05	114.92
NHAVSFDFIFSAVKN(de)FSEAASDFHR	2792.3307	IPI0011304Z	IPI0011304Z	yes	no	3,4		3.9947E-17	194.77
NGNATI(de)IR	857.47191	IPI0098582E	IPI0098582E	no	no		2	0.014287	144.12
NGNATI(de)IR	857.47191	IPI0098582E	IPI0098582E	no	no		2	0.014287	144.12
NGNA(de)TIIR	857.47191	IPI0098582E	IPI0098582E	no	no		2	0.014287	144.12
NGNA(de)TIIR	857.47191	IPI0098582E	IPI0098582E	no	no		2	0.014287	144.12
NGIASGSGN(de)CSTGPNGDGSFHAWSIIEVK	2918.3253	IPI00322497	IPI00322497	yes	yes		3	0.011282	60.86
NGHITN(de)YTVVYR	1435.7208	IPI00110264	IPI00110264	yes	yes		2	2.5942E-14	189.24
NF(de)TAADWGHSR	1260.5636	IPI0033988E	IPI0033988E	yes	no		2	0.0020817	137.16
NF(de)NVEKINGEWHTIIASDKR	2483.2921	IPI0094471E	IPI0094471E	no	no		3	5.4531E-19	204.94
NEVN(de)GTSEDIKSEVQRK	1931.9548	IPI0012241E	IPI0012241E	yes	no		2	0.015437	109.07
NEKPRPAVN(de)VTCAR	1610.8311	IPI0094468C	IPI0094468C	yes	yes		3	0.033205	101.32
NEIMIN(de)SSIMR	1306.6373	IPI0037869E	IPI0037869E	yes	no		2	0.0007552	140.14
NEEVKN(de)MSVEINSKIESIIEEK	2561.2894	IPI0012820E	IPI0012820E	yes	yes		3	5.4392E-05	147.25
NEEVKN(de)MSVEINSK	1619.7825	IPI0012820E	IPI0012820E	yes	yes		2	0.0027995	128.71
NEDRPIAPCGAIANSFMNDTIEIYIVAN(de)ESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no		4	0.0017113	52.377
NEDRPIAPCGAIANSFMN(de)DTIEIYIVANESDPKPIPIPIK	4422.224	IPI0038731E	IPI0038731E	yes	no		4	0.0017113	52.377
NAVN(de)CTYKNEDDCVVR	1955.8466	IPI00266264	IPI00266264	yes	yes	2,3		0.0001247	168.1
NATIAEQAKI(de)PATEKPVIIISK	2221.2682	IPI0012334Z	IPI0012334Z	yes	yes	2,3		0.0004111	168.05
NAKGDEKEN(de)ITAEIDISIK	2158.1117	IPI0012472E	IPI0012472E	yes	no	2,3		8.2716E-37	224.59
NAIQAFGN(de)GTDVNMSPK	1762.8308	IPI0011635E	IPI0011635E	yes	no		2	6.3295E-05	171.78
NAIN(de)ITFHAQNIPEGGAYEAEIR	2487.2142	IPI0011597E	IPI0011597E	yes	yes		3	2.3728E-51	237.24
NACCSVN(de)TSQEIHK	1646.7141	IPI0011315E	IPI0011315E	yes	yes		2	0.012759	95.981
N(de)YTDCTSEGR	1201.467	IPI0011353E	IPI0011353E	yes	no		2	0.010676	118.28
N(de)YSIFIADINQER	1581.7787	IPI0033131E	IPI0033131E	yes	no		2	5.9377E-06	165.86
N(de)VTYGTIYIDDPDPPDDGFNYK	2307.9808	IPI0039995E	IPI0039995E	yes	no		2	3.0119E-157	304.09
N(de)VTIECPFKR	1262.6441	IPI0031005E	IPI0031005E	yes	no		2	7.9364E-42	227.88
N(de)VSCIWCNENK	1422.602	IPI0037764Z	IPI0037764Z	yes	no		2	0.0021936	136.38
N(de)TTSYPPMCSQDAVGGQVISEIFTNRK	2999.4117	IPI0038728E	IPI0038728E	yes	yes		3	0.0008156	78.272
N(de)TTSYPPMCSQDAVGGQVISEIFTNR	2871.3167	IPI0038728E	IPI0038728E	yes	yes		3	0.011992	63.883
N(de)TTSAAMVHCIR	1359.6387	IPI0013121E	IPI0013121E	yes	yes		2	0.0021394	122.33
N(de)TTIYIDRAEAK	1393.7201	IPI0046853E	IPI0046853E	yes	no		2	0.011404	105.95
N(de)TTISVHPSTR	1211.6258	IPI00126834	IPI00126834	yes	no		2	0.005201	117.2
N(de)TTHIQR	981.53558	IPI0032122Z	IPI0032122Z	yes	yes		2	0.037975	104.2
N(de)STTIVMHMK	1160.5682	IPI0011906C	IPI0011906C	yes	yes		2	0.0016259	136.96
N(de)STKEEIIAAIEK	1444.7773	IPI0032119C	IPI0032119C	yes	no		2	1.3928E-13	185.27
N(de)STIQAANIAGIK	1299.7147	IPI00222937	IPI00222937	yes	no		2	0.0005135	154.1
N(de)SSNFHINQIQGIR	1626.8227	IPI0032323E	IPI0032323E	yes	yes		2	0.0009665	139.48
N(de)RTDVEYEIDEK	1509.6947	IPI0013474C	IPI0013474C	yes	yes		2	0.0029528	124.45
N(de)QTIEIHVIYGPR	1538.8205	IPI0012297C	IPI0012297C	yes	no		2	3.0456E-53	242.48
N(de)QSVGDPNVDIIR	1425.7212	IPI00127447	IPI00127447	yes	yes		2	5.031E-14	188.13
N(de)ITVIEPVTQPFIQVTNTTVK	2341.2893	IPI0010853E	IPI0010853E	yes	no		2	2.3893E-29	223.46
N(de)ITSPVGVQPIINEHTFCAGITK	2495.2842	IPI0040914E	IPI0040914E	yes	yes	2,3		1.3463E-06	175.86
N(de)ITMFISR	980.51134	IPI0022571E	IPI0022571E	yes	yes		2	0.031589	111.61
N(de)ITFQGPPIK	1113.6182	IPI00111794	IPI00111794	yes	no		2	0.0089509	123.51
N(de)ISVVVATHSPTIAK	1535.8671	IPI0022141E	IPI0022141E	yes	no		2	1.4782E-14	194.55
N(de)ISTCFSSGDIFAAHNISER	2225.0171	IPI0012342E	IPI0012342E	yes	no		2	3.1105E-19	204.47
N(de)ISGVVIADHSGSFHNR	1808.8918	IPI00118674	IPI00118674	yes	yes		2	7.0548E-05	153.75
N(de)HSIPIETK	1037.5506	IPI00129041	IPI00129041	yes	no		2	0.0037005	162.88
N(de)ETHSICSACDESCK	1796.6764	IPI0011128E	IPI0011128E	yes	yes		2	0.001086	128.71
N(de)CSTQHFPFR	1145.5036	IPI00322304	IPI00322304	yes	yes		2	0.017048	122.26
N(de)ATYGHYEPGEEFHVEDAETYKK	2828.2202	IPI0022179E	IPI0022179E	yes	no		3	1.6789E-06	148.75
N(de)ATVVWMKDNIR	1445.7449	IPI0012137E	IPI0012137E	yes	no		2	0.014264	103.88
N(de)ATVVWMK	947.48987	IPI0012137E	IPI0012137E	yes	no		2	0.012987	147.19
N(de)ATTYPPMCSQDAAR	1681.7188	IPI0012839E	IPI0012839E	yes	yes		2	4.1098E-08	181.26
N(de)ATSYPPMCSQDAGWAK	1882.7978	IPI0013834Z	IPI0013834Z	yes	yes		2	0.0001784	148.52
N(de)ATIVNEADKIR	1342.7205	IPI0031950E	IPI0031950E	yes	no		2	2.0685E-05	168.31
N(de)ATFSIANPVYVGNAAWAHIIAAR	2526.3132	IPI0097128E	IPI0097128E	yes	no		3	0.030765	67.227
N(de)ASSEYSGTYSCTVQNR	1922.8065	IPI0027037E	IPI0027037E	yes	no		2	5.3731E-77	258.14
MYVTN(de)DTEVAENNYEAIKDFFR	2668.2115	IPI0065853E	IPI0065853E	yes	no	2,3		3.2069E-09	183.56
MYSEGSDIVPQSN(de)ETAIHYFKK	2543.2002	IPI0013114C	IPI0013114C	yes	no	2,3		4.4945E-05	157.54
MYSEGSDIVPQSN(de)ETAIHYFK	2415.1053	IPI0013114C	IPI0013114C	yes	no	2,3		0.0001959	159.19
MVN(de)TTFICTATNAVGTGR	1912.9135	IPI0010937E	IPI0010937E	yes	no	2,3		0	330.54
MVN(de)HSIHPTPEVK	1487.7555	IPI00750217	IPI00750217	yes	no	2,3		0.0015286	134.68
MTYFVCTQIKVVRN(de)NSQVPK	2411.2454	IPI00988381	IPI00988381	yes	yes		3	0.033612	73.208
MTQIIGITPN(de)ATHIHRPPR	2152.1688	IPI0013032E	IPI0013032E	yes	yes		3	0.0098144	96.489
MTISQN(de)NSIIR	1275.6605	IPI0010853E	IPI0010853E	no	no		2	7.4578E-85	257.8
MSVINFEKN(de)KTAGK	1597.7592	IPI00308971	IPI00308971	yes	yes		2	0.0001402	158.52



MSVINFECDN(de)K	1240.558	IPI00308971	IPI00308971	yes	yes	2	0.036661	94.465
MSQHPIQEDFNATIVN(de)ASSIIPK	2881.428	IPI00762812	IPI00762812	yes	yes	3	0.0055751	65.425
MRSQGAQDN(de)VSVSQGM	1818.8465	IPI0034858E	IPI0034858E	yes	no	3	8.8992E-14	202.63
MQVVSND(de)GTVTTAIWR	1661.8559	IPI0033117E	IPI0033117E	yes	no	2	5.7464E-06	161.24
MQDTIEHHVNSDTSAPSTIEYGNR	2913.3563	IPI0012095E	IPI0012095E	yes	yes	3	1.434E-07	122.3
MQDTIEHHVND(de)VSAPSTIEYGNR	2913.3563	IPI0012095E	IPI0012095E	yes	yes	3	1.434E-07	122.3
MPSQASAGNVYPQPIIN(de)SSMCIEDSR	2851.2939	IPI0022475E	IPI0022475E	yes	yes	3	3.3238E-10	138.44
MPPFDQDFYVSPTFQDIIN(de)R	2542.2202	IPI0031817E	IPI0031817E	yes	yes	3	0.0004657	110.56
MNPDIDTGHN(de)TSAPAHWGEIK	2290.0437	IPI0031442E	IPI0031442E	yes	no	3	0.0026099	89.261
MN(de)RSIQIISTPWIGAYIK	2090.1347	IPI0011553E	IPI0011553E	yes	yes	2	0.01302	89.358
MN(de)MSVITIQEYEFEK	1860.8638	IPI0046143E	IPI0046143E	yes	yes	2	7.9681E-06	154.51
MIVSNIDIGPTIIDIAGYDIN(de)KTQMDGMSIPIIK	3801.997	IPI0022142E	IPI0022142E	yes	yes	4	0.0031694	54.003
MITNEKIDAYNEAAVSIIN(de)SSSTR	2539.2588	IPI0038029E	IPI0038029E	yes	yes	3	0.017437	74.048
MIHN(de)TTGVYTCSAHGTWTNEVIK	2775.3221	IPI0047520E	IPI0047520E	yes	no	3	4.0631E-07	180.8
MIEN(de)GSISFIPTIR	1576.8283	IPI00123194	IPI00123194	yes	yes	2,3	1.1314E-15E	300.51
MIEAYN(de)ITEK	1210.5904	IPI0012143C	IPI0012143C	yes	no	2	0.011285	120.96
MHING(de)SNVQVIHR	1503.7729	IPI0011906E	IPI0011906E	yes	yes	2,3	3.9536E-06	168.31
MGDREAIGN(de)ASQIFDSWIKGSASIPVNIR	3131.5822	IPI0013458E	IPI0013458E	yes	yes	3	0.0048378	68.361
MGDREAIGN(de)ASQIFDSWIK	2137.0262	IPI0013458E	IPI0013458E	yes	yes	2,3	0.0002228	144.97
MFSQN(de)DTR	997.42873	IPI0012925C	IPI0012925C	yes	yes	2	0.027424	128.36
MEISVGAIQAN(de)R	1287.6605	IPI00108811	IPI00108811	yes	yes	2	0.0024106	144.57
MEAHNVSAFND(de)FSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4	1.0186E-39	233.59
MEAHN(de)VSAPFNSIPPGFGHR	2311.0957	IPI0011548E	IPI0011548E	yes	no	2,3,4	1.0186E-39	233.59
MEAEN(de)HTAIVHFIIIGISEDPK	2463.2468	IPI0012537C	IPI0012537C	yes	yes	3	0.028866	56.036
MDYNSFQGTSPN(de)ETK	1717.7254	IPI00876541	IPI00876541	yes	no	2	0.0045752	110.84
MDTSMN(de)FSR	1087.4427	IPI0013621C	IPI0013621C	yes	yes	2	2.7785E-42	232.41
MDIRP(de)NHTIYINNMNDKIK	2329.1671	IPI0013257E	IPI0013257E	yes	no	2,3	0.0020735	105.39
MDGHCAPIRTEAGVFEYVADPTFEN(de)FTGGVKK	3542.6599	IPI0040574E	IPI0040574E	yes	no	4	0.0002239	78.3
MDGHCAPIRTEAGVFEYVADPTFEN(de)FTGGVK	3414.5649	IPI0040574E	IPI0040574E	yes	no	3,4	1.8522E-06	100.23
MDFIIFN(de)YSAPSIR	1835.8916	IPI0055350E	IPI0055350E	yes	yes	2	0.0014052	121.79
MATPIIMRPMMDNMIIGPVKN(de)VTK	2787.4342	IPI0011589E	IPI0011589E	yes	no	3	0.0024096	94.259
MAIIQYGSQNNQVAFPIYND(de)VTTIHEAIER	3562.7879	IPI00621027	IPI00621027	yes	yes	4	3.4617E-07	109.26
MAAAINATGRPIAFSCSWPAYEGGIPPKVN(de)YTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no	4	3.871E-14	103.27
MAAAIN(de)ATGRPIAFSCSWPAYEGGIPPKVNYTEVSR	3880.9029	IPI0031559E	IPI0031559E	yes	no	4	3.871E-14	103.27
KYQTI(de)NCSVNV	1480.7456	IPI0042083E	IPI0042083E	yes	no	2	0.0022909	129.54
KYHDYITSTS(de)NGSIEGIENR	2446.1401	IPI00130754	IPI00130754	yes	yes	3	9.1285E-29	223.18
KYFDQVDIS(de)NGIDWSIDHK	2279.0859	IPI0013345E	IPI0013345E	yes	yes	3	1.1089E-39	233.79
KYEQAK(de)NISQDIEK	1692.8683	IPI0040001E	IPI0040001E	yes	no	2	9.4728E-29	220.27
KWPERISAI(de)DNIINHSSIFIK	2480.354	IPI0012334E	IPI0012334E	yes	yes	3	2.3853E-05	180.1
KWGH(de)NVTEFQQR	1528.7535	IPI0075438E	IPI0075438E	yes	yes	2	0.0018282	156.36
KVYEEVIN(de)VTPNDGFAK	1921.9785	IPI0062489E	IPI0062489E	yes	no	2	0.0025898	133.94
KVPSN(de)STETVIESDQFQPGVR	2317.155	IPI0011929E	IPI0011929E	yes	no	2,3	0.0001923	122.49
KVIVAPPSEEAN(de)TTK	1582.8566	IPI00470184	IPI00470184	yes	no	2	0.02631	94.007
KVIIN(de)NSIDEPR	1396.7674	IPI0041114E	IPI0041114E	yes	no	2	0.016799	100.55
KVEVEPIN(de)STAVHVSWK	1922.0262	IPI00110264	IPI00110264	yes	yes	2,3	5.0981E-27	217.35
KVEVEAVN(de)ATAVK	1356.7613	IPI0060806E	IPI0060806E	yes	no	2	9.0746E-14	188.12
KVEAEAIN(de)ATAIR	1384.7674	IPI0075485E	IPI0075485E	yes	no	2	0.0064349	114.64
KVDN(de)ASIVADDMR	1432.698	IPI0035646E	IPI0035646E	yes	no	2	0.0090035	111.64
KTYAVYDIFDTAMIN(de)NSR	2121.0201	IPI0022679C	IPI0022679C	yes	no	2,3	3.2572E-19	210.39
KTTIEN(de)FTCPPEYK	1629.7709	IPI0042081C	IPI0042081C	yes	yes	2	0.011752	105.03
KTN(de)QSCEIVIDSTEKNVPSYIGR	2637.3068	IPI0031005E	IPI0031005E	yes	no	3	3.2693E-05	147.67
KTN(de)QSCEIVIDSTEK	1750.8407	IPI0031005E	IPI0031005E	yes	no	2	3.7254E-21	211.9
KTMFN(de)STEIK	1197.6064	IPI0067739E	IPI0067739E	yes	no	2	0.017917	124.12
KTISSSN(de)NTITGFIIGFPCPR	2422.2679	IPI00126424	IPI00126424	yes	yes	3	0.024697	66.893
KTGVHDGDFEYN(de)ITTTIAAINK	2407.202	IPI0010884E	IPI0010884E	yes	no	3	3.9869E-06	170.61
KTGEAN(de)ITQIYTQEAIDFIQTQHAR	2875.4464	IPI0031009C	IPI0031009C	yes	no	3,4	1.0187E-42	228.31
KTCNPETFPIRN(de)ESIQCPTAR	2518.2057	IPI0064918E	IPI0064918E	yes	no	3	0.011002	96.391
KSPGYVIDIIVTPQN(de)K	1770.988	IPI0010994E	IPI0010994E	yes	yes	2	0.0003011	147.17
KSDTQNIIN(de)VSTGR	1694.8588	IPI01023214	IPI01023214	yes	no	2	0.0053253	113.88
KSCHTAVGTSEGWNVPMGIIN(de)QTGSCK	3081.4107	IPI0047108C	IPI0047108C	yes	no	3	5.9904E-10	123.44
KQVTPIFFYFQN(de)R	1686.8882	IPI0031950E	IPI0031950E	yes	no	2,3	0.0067135	113.99
KPNN(de)ISDTVK	1114.5982	IPI0010884E	IPI0010884E	yes	yes	2	0.01612	123.51
KPISQFEAYVN(de)ASGEHGIVVFSIGSMVSEIPEKK	3805.9237	IPI00134691	IPI00134691	yes	no	4	2.0233E-09	93.384
KPIIGHYKPDIAVVIEN(de)GTSIDR	2635.4334	IPI0041079E	IPI0041079E	yes	no	3	1.2841E-06	179.19
KNVNISYTV(de)NDSFFPQRPQK	2381.2128	IPI0038117E	IPI0038117E	yes	yes	2,3,4	0	390.4
KNVN(de)ISYTVNDSFFPQRPQK	2381.2128	IPI0038117E	IPI0038117E	yes	yes	2,3,4	0	390.4
KN(de)ITDIVEGAKK	1314.7507	IPI0064918E	IPI0064918E	yes	no	2	0.019378	111.12
KN(de)ISEIWDAYCYR	1716.793	IPI0098726E	IPI0098726E	yes	no	2	7.0166E-18	196.33
KMVIWN(de)DSTIR	1361.7126	IPI0013597E	IPI0013597E	yes	yes	2	0.025851	101.89
KMISAFN(de)ATSGK	1253.6438	IPI0046699E	IPI0046699E	yes	no	2	0.0033897	124.51
KKENGVFEEISN(de)SSGR	1779.8751	IPI00757771	IPI00757771	yes	no	2,3	4.5825E-27	218.66
KITDVETQVIN(de)QTSR	1730.9163	IPI0011435C	IPI0011435C	yes	yes	2	2.4621E-06	164.93
KITAN(de)STWQPDKAK	1586.8417	IPI0065367E	IPI0065367E	yes	no	2	2.9596E-06	182.02
KISTN(de)ITIVCKPGDIESAPVIR	2410.3254	IPI00308971	IPI00308971	yes	yes	3	0.0001559	116.73
KINIDGSN(de)YTIK	1477.814	IPI0011906E	IPI0011906E	yes	yes	2	1.1793E-31	216.88
KINASIVTSFVEIIVSN(de)VSIR	2385.3631	IPI00323857	IPI00323857	yes	no	2,3	1.3972E-05	127.17
KIN(de)YTIK	878.52255	IPI0031950E	IPI0031950E	yes	yes	2	3.9411E-09	183.26
KIN(de)CSQEQVPGSSQCDREPEPR	2600.1707	IPI0022291E	IPI0022291E	yes	yes	3	0.021078	81.723
KIN(de)ASIVTSFVEIIVSN(de)VSIR	2385.3631	IPI00323857	IPI00323857	yes	no	2,3	1.3972E-05	127.17
KIIASPNEEN(de)MTEIISMR	2075.0391	IPI0032257E	IPI0032257E	yes	no	2,3	4.8038E-06	181.51
KIDFIVIN(de)ETR	1346.7558	IPI0012581E	IPI0012581E	yes	no	2,3	1.1427E-11	190.85
KHYQVTGYGIN(de)GTGDSNDFWR	2414.104	IPI0022166E	IPI0022166E	yes	no	3	4.5898E-06	181.94
KGN(de)NTINPFIIIPSASDVPTGCPNQWWPYAGHCYR	3916.8202	IPI0012618E	IPI0012618E	yes	yes	4	0.0019093	61.526
KGIVSGGVYNSHVGCIPYTIPPCHEHV(de)NGSRPPCTGEGDTPF	4558.1329	IPI00113517	IPI00113517	yes	yes	4	8.808E-06	64.221
KGFCEADN(de)STVSENPNPEDWPNTEGCMK	3343.3704	IPI0010809E	IPI0010809E	yes	yes	3	4.665E-11	123.44
KGCADYCN(de)QTITK	1557.6916	IPI0098726E	IPI0098726E	yes	no	2	1.3433E-05	163.99

KFPVPFQKEN(de)VTATIVEIGR	2272.258	IPI00134691	IPI00134691	yes	yes	2,3	1.0157E-18	205.78
KFN(de)STQIAAMAPEHEEPR	2054.9844	IPI00856861	IPI00856861	yes	no		3 0.0006009	157.58
KFHVN(de)YTQPIVAVK	1642.9195	IPI00123704	IPI00123704	yes	no		2 9.3621E-07	170.95
KFEAENISN(de)YTAIISQDGK	2240.1325	IPI0046413E	IPI0046413E	yes	no		2 1.5921E-12	195.03
KEVHFFVN(de)ASDVDSVK	1819.9105	IPI0031004E	IPI0031004E	yes	yes		2 0.017075	98.507
KEQETCIAPEIEHGN(de)YSTTQR	2490.1445	IPI00122117	IPI00122117	yes	yes		3 5.2746E-05	150.68
KENGVFEEISNS(de)SGR	1651.7802	IPI00757771	IPI00757771	yes	no		2 1.4624E-21	212.95
KENG(de)VFEEISNSSGR	1651.7802	IPI00757771	IPI00757771	yes	no		2 1.4624E-21	212.95
KEN(de)SSYQVINWR	1522.7528	IPI0015331E	IPI0015331E	yes	yes	2,3	4.9081E-19	200.21
KEN(de)SSEICSNNGECVCGQCVC	2646.0349	IPI00132474	IPI00132474	yes	no		3 5.5172E-51	238.68
KEDSCQIN(de)YSEGPCIGMQR	2400.0144	IPI00127352	IPI00127352	yes	yes	2,3	6.8259E-09	192.62
KDTCAQECSHFN(de)ITKVESR	2309.0529	IPI00132474	IPI00132474	yes	no		3 7.3131E-49	241.68
KDTCAQECSHFN(de)ITK	1837.8087	IPI00132474	IPI00132474	yes	no	2,3	1.6236E-49	237.48
KDGSQDFN(de)ETWENYEK	1988.8388	IPI0012820E	IPI0012820E	yes	yes		2 4.7653E-05	171.78
KCEVICN(de)QSNKPITITVEQSR	2503.2523	IPI00626537	IPI00626537	yes	yes		3 0.0009792	114.46
KCEAN(de)ITISSPAR	1445.7297	IPI00894972	IPI00894972	yes	no		2 0.0024419	138.21
KAWGISVINP(de)NKTK	1554.8882	IPI0098909E	IPI0098909E	yes	yes	2,3	0.0028181	143.93
KAFITN(de)FSMIIDGVTYPGVVKEK	2556.3662	IPI00312711	IPI00312711	yes	no		3 0.0001715	163.68
KAFITN(de)FSMIIDGVTYPGVVK	2299.2286	IPI00312711	IPI00312711	yes	no	2,3	7.9784E-05	152.47
K(de)NITSPVGVQPIINEHTFCAGITK	2623.3792	IPI0040914E	IPI0040914E	yes	yes		3 0.002136	91.337
K(de)IVIYIEHNIKNSTK	1928.0731	IPI0032119C	IPI0032119C	yes	no	2,3	1.9909E-12	195.23
IYWTDGDNISMANMDGSN(de)HTIIFSGQKGPVGIADFPESK	4325.0409	IPI0011906E	IPI0011906E	yes	yes		4 0.0006077	51.975
IYWTDGDNISMANMDGSN(de)HTIIFSGQK	3014.3539	IPI0011906E	IPI0011906E	yes	yes		3 1.093E-09	146.97
IYWTDGDN(de)ISMANMDGSNHTIIFSGQKGPVGIADFPESK	4325.0409	IPI0011906E	IPI0011906E	yes	yes		4 0.0006077	51.975
IYWTDGDN(de)ISMANMDGSNHTIIFSGQK	3014.3539	IPI0011906E	IPI0011906E	yes	yes		3 1.093E-09	146.97
IYWISSGNHTIN(de)R	1559.7845	IPI0011906E	IPI0011906E	yes	yes	2,3	5.0678E-14	188.09
IYWISSGN(de)HTINR	1559.7845	IPI0011906E	IPI0011906E	yes	yes	2,3	5.0678E-14	188.09
IYVIDGTQN(de)DTAFVFP	1954.9789	IPI0030865E	IPI0030865E	yes	no		2 0.000138	168.41
IYSDQCHHNISIIPPTEIVCN(de)R	2762.3269	IPI0012344E	IPI0012344E	yes	yes		3 0.0083815	74.698
IYSDQCHHN(de)ISIIPPTEIVCNR	2762.3269	IPI0012344E	IPI0012344E	yes	yes		3 0.0083815	74.698
IYPIEN(de)ITIAPDPHPVPSIPPVAYNPWMDIR	3542.7908	IPI01023131	IPI01023131	yes	no		3 1.044E-06	98.967
IYNVTHQFCN(de)ASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3	5.0365E-09	191.78
IYN(de)VTHQFCNASVMDPTCVR	2411.0821	IPI0013260C	IPI0013260C	yes	no	2,3	5.0365E-09	191.78
IYIRN(de)ESEFRDK	1568.7947	IPI0011597E	IPI0011597E	yes	yes		3 0.048504	97.734
IYIRN(de)ESEFR	1325.6728	IPI0011597E	IPI0011597E	yes	yes		2 0.022623	112.36
IYIDHNN(de)ITR	1257.6466	IPI00120187	IPI00120187	yes	yes		2 9.5174E-06	175.15
IYAGMVSIMDEAVGNV(de)TK	1896.9325	IPI0065235E	IPI0065235E	yes	no		2 6.6069E-06	178.88
IWIPVN(de)ITWADIEDKDGR	2140.0953	IPI0012625E	IPI0012625E	yes	no	2,3	3.1412E-27	219.23
IWDPSSHPGIQN(de)ISR	1705.8536	IPI0033820E	IPI0033820E	yes	no		2 0.0011159	127.57
IVTQTIPCN(de)KTIFWSK	1935.0288	IPI0030796E	IPI0030796E	yes	yes		2 0.0019637	136.63
IVTQTIPCN(de)K	1172.6223	IPI0030796E	IPI0030796E	yes	yes		2 2.3393E-31	218.6
IVPCEFGVIPIAEN(de)FSR	2110.0557	IPI0012190E	IPI0012190E	yes	no		3 0.0017468	115.38
IVKIPSGTIVISN(de)ATEGDGGIYR	2359.2747	IPI0012915E	IPI0012915E	yes	no		3 0.0168	72.644
IVIWTAEEQGGIGASQYIEIHKAN(de)ISK	3004.5294	IPI0012605C	IPI0012605C	yes	no		3 0.043486	53.779
IVIN(de)HTQMNTAIQWHPVDTFGPIQGYR	3345.7081	IPI0060806E	IPI0060806E	yes	no		4 0.021483	52.019
IVGSPFIGCTVVN(de)K	1489.7963	IPI0013480E	IPI0013480E	yes	no		2 0.0055131	107.65
IVGGTN(de)ASIGEWVWQVSIQVK	2268.1903	IPI00113057	IPI00113057	yes	yes		2 3.1523E-78	257.72
IVEDIESFIKPYSVEEQKN(de)ITSCPDGAPFIQHGPDYR	4278.0579	IPI00124221	IPI00124221	yes	yes		4 1.6627E-16	119.42
IVDVN(de)ITSEGKVK	1400.7875	IPI0011352E	IPI0011352E	yes	no		2 0.0027885	126.1
IVDVN(de)ITSEK	1173.6241	IPI0011352E	IPI0011352E	yes	no		2 0.004046	125.03
IVAN(de)ISGCAAVNSETIMCCIR	2338.0902	IPI0022248E	IPI0022248E	yes	yes		2 1.1414E-49	238.8
IV(de)VPINNRENISDPTSPIRR	2289.2553	IPI0013692E	IPI0013692E	yes	no		3 0.0033943	107.51
IV(de)VPINNRENISDPTSPIR	2133.1542	IPI0013692E	IPI0013692E	yes	no	2,3	0.0012002	131.18
IV(de)SDVQTAVKTNSSFIQGFVDHVKEDCDR	3293.5987	IPI0032119C	IPI0032119C	yes	no		3 0.0002704	80.786
ITYESGFIN(de)YSK	1420.6874	IPI00666034	IPI00666034	yes	no		2 1.7229E-66	247.88
ITVVYAEN(de)GTVIQGTTVASVYK	2312.2264	IPI0031735E	IPI0031735E	yes	yes	2,3	6.3063E-79	223.93
ITVPSSQN(de)SSFR	1321.6626	IPI0051536C	IPI0051536C	yes	no		2 0.02934	85.522
ITSCATN(de)ASMCGDEAR	1742.7022	IPI0011906E	IPI0011906E	yes	yes		2 2.2564E-18C	314.51
ITNEAHKEN(de)CTGR	1528.7052	IPI0076010E	IPI0076010E	yes	no		2 0.0099566	107.99
ITN(de)VTFPTGVVTNIHGDMDK	2158.0729	IPI0079846E	IPI0079846E	yes	no	2,3	0.0003213	130.56
ITN(de)QTIGFSFAVEQDIPVK	2106.0997	IPI0062466E	IPI0062466E	yes	yes	2,3	3.1056E-20E	321.68
ITN(de)ISDATKR	1117.6091	IPI00849192	IPI00849192	yes	yes		2 0.001706	162.26
ITIEVFDVPKPSIEIN(de)KTEASTDSCHIR	3295.6758	IPI0010994E	IPI0010994E	yes	yes		3 9.4216E-12	151.06
ITIAIN(de)NTITPHTIPPPTIVYK	2376.3417	IPI0030923C	IPI0030923C	yes	no	2,3	7.5515E-80	255.98
ITHIPDDIPSNITVIN(de)ITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes		3 3.5595E-05	114.55
ITHIPDDIPSN(de)ITVINITHNQIR	2623.4082	IPI0032061E	IPI0032061E	yes	yes		3 3.5595E-05	114.55
ITFFNSTIN(de)TSGIVAQGEAIPGHRPGIVTK	3405.8409	IPI00153317	IPI00153317	yes	yes	3,4	1.3096E-06	85.002
ITEFTHN(de)STMDYK	1585.7083	IPI0013001C	IPI0013001C	yes	no		2 0.0017146	127.79
ITDNMFCAGFKVN(de)DTK	1859.8546	IPI0011420E	IPI0011420E	yes	yes	2,3	0.0048594	116.35
ITANS(de)TWQPDKAK	1458.7467	IPI0065367E	IPI0065367E	yes	no		2 9.8821E-30	216.88
ITANNSMGASPESIMVISN(de)DSGHEEVKEK	3073.4332	IPI00118291	IPI00118291	yes	yes		3 0.0012468	69.981
ITAN(de)NSMGASPESIMVISNDSGHEEVKEK	3073.4332	IPI00118291	IPI00118291	yes	yes		3 0.0012468	69.981
ISVPDGIKVSN(de)SSAR	1528.8209	IPI00120761	IPI00120761	yes	no	2,3	0.0020812	130.47
ISTSPFAIN(de)ITMIPK	1631.8957	IPI00666034	IPI00666034	yes	no		2 7.3826E-07	169.94
ISTNI(de)TIVCKPGDIESAPVIR	2282.2304	IPI00308971	IPI00308971	yes	yes		2 0.0001901	122.53
ISSPN(de)VTISCK	1291.6442	IPI0022571E	IPI0022571E	yes	no		2 4.0114E-09	177.81
ISQN(de)ASIGPHVRPIPIQYEDKEVEPGTICDVAGWGVVTHAGR	4552.2921	IPI0011694E	IPI0011694E	yes	no	4,5	2.7632E-33	141.13
ISQKN(de)QTVFER	1348.7099	IPI00130117	IPI00130117	yes	no		2 0.017798	105.65
ISQAIGN(de)ITVVQK	1369.7929	IPI0011203E	IPI0011203E	yes	no		2 0.003407	115.34
ISPIHAIN(de)FSIDPK	1663.9297	IPI0011597E	IPI0011597E	yes	yes		2 0.0003214	142.91
ISPGGAEMFQVQDMVVSQEKGND(de)CSIQR	2994.3998	IPI00130117	IPI00130117	yes	no		3 0.0005035	78.352
ISNISN(de)ISHDIVQEATDHAYNIQQEAEISR	3509.6659	IPI0022344E	IPI0022344E	yes	yes	3,4	1.1283E-12	163.32
ISN(de)VTPEDAGTYCVK	1815.8349	IPI0012915E	IPI0012915E	yes	no		2 4.1389E-06	179.17
ISN(de)ISNISHDIVQEATDHAYNIQQEAEISR	3509.6659	IPI0022344E	IPI0022344E	yes	yes	3,4	1.1283E-12	163.32
ISISEN(de)YTISIANAK	1622.8516	IPI0012137E	IPI0012137E	yes	no		2 3.6172E-16	203.27
ISHYN(de)DTYPISPPQR	1786.8638	IPI0011303E	IPI0011303E	yes	no	2,3	2.4087E-50	242.19

ISHYKQN(de)FSFCR	1585.746	IPI00381303	IPI00381303	yes	yes		2	0.0032816	122.46
ISHEN(de)GTIICSK	1357.666	IPI00338094	IPI00338094	yes	yes		2	0.0011381	131.35
ISHDGN(de)ETIPIHIYVK	1834.9577	IPI00405742	IPI00405742	yes	no	2,3		3.3975E-11	283.1
ISGNSIHN(de)ASIPHEIAYGSVITVK	2506.318	IPI00221669	IPI00221669	yes	no		3	0.0001067	110.4
ISGN(de)ITIIR	985.59203	IPI00137311	IPI00137311	yes	yes		2	0.0077663	138.22
ISGKPTN(de)VSVSVIMSEGDGICY	2312.1028	IPI00968978	IPI00968978	yes	no		2	1.5651E-30	223.54
ISEN(de)GSSVAGIISSPNMEK	1918.9306	IPI00399798	IPI00399798	yes	no		2	0.0001336	145.52
ISEGNRTITIINVTRN(de)DTGYPVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4		0.0018219	92.01
ISEGNR(de)TITIINVTRNDTGPYVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4		0.0018219	92.01
ISEGNR(de)TITIINVTR	1685.9424	IPI00108535	IPI00108535	yes	no		2	0.0099454	107.74
ISEGN(de)RTITIINVTRNDTGPYVCETR	2978.488	IPI00108535	IPI00108535	yes	no	3,4		0.0018219	92.01
ISEGN(de)RTITIINVTR	1685.9424	IPI00108535	IPI00108535	yes	no		2	0.0099454	107.74
ISEFIKN(de)ISASAR	1563.8257	IPI0089497C	IPI0089497C	yes	no	2,3		0.0066232	112.42
ISDTN(de)ITAIPQGIPTSITEVHIDGNKITKVDAPSIK	3786.0415	IPI0012319E	IPI0012319E	yes	yes		4	1.2776E-05	72.687
ISDTN(de)ITAIPQGIPTSITEVHIDGNKITK	3075.6452	IPI0012319E	IPI0012319E	yes	yes	3,4		3.6746E-11	124.31
ISDTN(de)ITAIPQGIPTSITEVHIDGNK	2733.4185	IPI0012319E	IPI0012319E	yes	yes	2,3		2.6579E-09	117.35
ISCAFKTEN(de)QTR	1453.6984	IPI0012024E	IPI0012024E	yes	no		2	0.022082	97.69
ISASGAEIEAIEAQVIN(de)ISIK	2155.1736	IPI00312711	IPI00312711	yes	no	2,3		1.5546E-20	320.92
ISAIIDNIIN(de)HSSIFIK	1783.9832	IPI00123342	IPI00123342	yes	yes	2,3		1.3078E-17	305.29
IRPIFN(de)KSFESTVGQGSYIFR	2911.4505	IPI00108844	IPI00108844	yes	yes	3,4		2.0744E-08	143.47
IRPHFISVCDPDFSQIN(de)CSEGYIQNYR	3314.5237	IPI0011562E	IPI0011562E	yes	yes		3	1.6679E-09	175.86
IRNPCTSE(de)QNCTSPFSYK	2187.9677	IPI00132474	IPI00132474	yes	yes	2,3		6.8986E-19	205.78
IRN(de)SSIGGVINKYDVVIR	2002.1324	IPI00314673	IPI00314673	yes	yes		3	0.0040303	130.4
IRN(de)SSIGGVINK	1256.7201	IPI00314673	IPI00314673	yes	yes		2	0.019809	98.902
IRDYEEN(de)SSSCHKEVQIIK	2334.1274	IPI00330594	IPI00330594	yes	yes		3	0.0006659	149
IRDQIEDNVHISPN(de)GSIIIVGTRPSNHGAYR	3657.8612	IPI0051536C	IPI0051536C	yes	yes		4	3.941E-07	89.723
IRDNAIGN(de)VSCTIHNEAIGQEK	2438.1972	IPI0012451E	IPI0012451E	yes	no		3	0.0001095	162.32
IRAEQITIHAIGIGEAN(de)KTQIR	2431.3659	IPI00990932	IPI00990932	yes	no		3	0.0001626	116.39
IQKIQD(de)FFNGKEINK	1934.0625	IPI00323357	IPI00323357	yes	no		3	0.0038976	137.46
IQKENDNFN(de)ISKDDIDITIFHGENK	2946.4359	IPI0067425E	IPI0067425E	yes	yes		3	7.4696E-06	120.33
IQIEFRPIDIN(de)STAAGIPR	2110.1535	IPI0011551C	IPI0011551C	yes	yes	2,3		9.6781E-08	183.31
IQDIEITGSPVSNISAHIFSN(de)ISSIEK	2898.4975	IPI00119522	IPI00119522	yes	yes	3,4		3.5013E-11	183.01
IQDIEITGSPVSN(de)SAHIFSNISSIEK	2898.4975	IPI00119522	IPI00119522	yes	yes	3,4		3.5013E-11	183.01
IQDFIVDNETFSGFIQHN(de)ISIPR	2689.35	IPI00112614	IPI00112614	yes	yes		3	1.5387E-05	164.99
IQDFIVDN(de)ETFSGFIQHNISIPR	2689.35	IPI00112614	IPI00112614	yes	yes		3	1.5387E-05	164.99
IQCVDGN(de)WTTIPVCIEER	2318.0671	IPI0013001C	IPI0013001C	yes	no		2	1.0432E-06	183.06
IPVAVIN(de)ATAK	1095.6652	IPI00122491	IPI00122491	yes	yes		2	0.0045602	121.9
IPSSIENATSISIMN(de)ITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes	3,4		1.2977E-15	128.91
IPSSIEN(de)ATSISIMNITGTAICHISDIPPDGIR	3492.7593	IPI0012177E	IPI0012177E	yes	yes	3,4		1.2977E-15	128.91
IPQQIHYYIN(de)ASDWER	2005.9759	IPI00666034	IPI00666034	yes	no		3	0.021619	85.837
IPQGTFSNIEN(de)ITIIDIQHKN	2394.2543	IPI00129867	IPI00129867	yes	no		3	0.0002386	114.99
IPNNTQWITW(de)SPEGHK	1906.9326	IPI00125813	IPI00125813	yes	no	2,3		5.077E-06	178.23
IPN(de)ISIDVIQPSFPEIIIESHMVMIR	2990.5973	IPI0022166E	IPI0022166E	yes	no		3	3.5628E-05	108.5
IPFSPENTREEDFYVN(de)ETSTVK	2601.2235	IPI0011610E	IPI0011610E	yes	yes		3	4.1057E-06	175.33
IPFNVIMNVEDIIEQQTFN(de)DTVSPR	3032.4913	IPI0031004E	IPI0031004E	yes	yes	3,4		0.0001835	103.92
IPFN(de)ISEWQK	1260.6503	IPI00118011	IPI00118011	yes	no		2	0.018566	106.29
IPEN(de)QTIPGEIPEHAGPAEGVHDSR	2649.2783	IPI00856221	IPI00856221	yes	yes		3	0.0005282	87.319
INSAPVEGYSEHVGN(de)KTTIR	2171.0971	IPI0034983C	IPI0034983C	yes	no	2,3		4.1682E-05	177
INSAPVEGYSEHVGN(de)K	1699.8166	IPI0034983C	IPI0034983C	yes	no		2	4.6182E-05	154.88
INNGGCQDICIITHQGHVN(de)CSCR	2712.1737	IPI00119063	IPI00119063	yes	yes		3	0.0019578	93.381
INN(de)ITNIGPIDMK	1441.7599	IPI0033068C	IPI0033068C	yes	no		2	8.1626E-14	185.95
INMTIPDAIVPTFSISN(de)HSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3		1.1613E-15	299.43
INIDGSNY(de)TIK	1349.7191	IPI00119063	IPI00119063	yes	yes		2	4.292E-19	198.32
INETHIFN(de)GSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3		0.0001307	162.46
IN(de)YTIVGEPIR	1273.703	IPI00120674	IPI00120674	yes	no		2	0.018082	97.463
IN(de)YTCNQGYR	1287.5666	IPI00138061	IPI00138061	yes	no		2	1.3251E-22	211.64
IN(de)YSIPTGQSMEVQIPK	1903.9713	IPI0040393E	IPI0040393E	yes	no		2	0.0020387	128.74
IN(de)VTSPDIFR	1160.619	IPI00116913	IPI00116913	yes	yes		2	0.0037173	136.48
IN(de)VTEVYDKIK	1320.7289	IPI00225072	IPI00225072	yes	no		2	6.4707E-24	206.1
IN(de)VTEVYDK	1079.5499	IPI00225072	IPI00225072	yes	no		2	0.040974	97.734
IN(de>VSYTGERPSSNMVIVDVK	2207.1256	IPI00624663	IPI00624663	yes	yes	2,3		5.6965E-05	147.09
IN(de>VSYTGER	1037.5142	IPI00624663	IPI00624663	yes	yes		2	0.0002412	172.27
IN(de>VSHAGAPIGEEYIIVFSR	2171.1375	IPI00785452	IPI00785452	yes	no		3	0.0077947	87.24
IN(de>TTSDEKDPTNPFRFPNIGVEK	2618.2976	IPI00131881	IPI00131881	yes	no		3	0.0015143	105.5
IN(de>TTSDEKDPTNPFR	1733.822	IPI00131881	IPI00131881	yes	no		2	3.0184E-07	173.71
IN(de>NSQIK	815.45012	IPI00222967	IPI00222967	yes	no		2	0.027071	137.18
IN(de>MTIPDAIVPTFSISNHSIK	2297.209	IPI0046921E	IPI0046921E	yes	yes	2,3		1.1613E-15	299.43
IN(de>KTVAIHTIDPEKIGQGGVQK	2345.3067	IPI00323624	IPI00323624	yes	no		3	9.4813E-05	169.67
IN(de>KTVAIHTIDPEK	1577.8777	IPI00323624	IPI00323624	yes	no		2	0.0001052	159.18
IN(de>ITDTPK	900.49165	IPI0012239E	IPI0012239E	yes	no		2	0.026159	113.71
IN(de>ITSWKET	1090.5659	IPI0011348C	IPI0011348C	yes	no		2	0.022495	128.81
IN(de>ITAAQISQIEGIIQAR	1938.0898	IPI0011551E	IPI0011551E	yes	no		3	3.8498E-19	205.78
IN(de>ISEGEVAATVK	1329.714	IPI00458003	IPI00458003	yes	yes		2	2.7386E-32	220.85
IN(de>GTDPPIVAADSKR	1455.7682	IPI00119063	IPI00119063	yes	yes		2	7.82E-29	217.48
IN(de>GTDPPIVAADSK	1299.667	IPI00119063	IPI00119063	yes	yes		2	6.6369E-66	250.52
IN(de>FTGPGEPDSIR	1401.6888	IPI0032060E	IPI0032060E	yes	no		2	1.3822E-05	162.97
IN(de>ETHIFNGSNWIMIIYK	2192.1088	IPI00108844	IPI00108844	yes	yes	2,3		0.0001307	162.46
IN(de>ATHFYACGTHAFQPICAAIDAETFIIPTSFEEGKEK	4284.0296	IPI0012466E	IPI0012466E	yes	no		4	0.0002488	63.776
IMQDPIQQAEGIYCN(de)R	1934.8979	IPI0031454E	IPI0031454E	yes	yes	2,3		1.514E-05	172.91
IMNIEFYDCSCVSGSGFQKGN(de)HSAR	2863.2476	IPI0023031E	IPI0023031E	yes	no		3	0.0004305	105.06
IMNAPIYIAEWQNITKN(de)ISED	2618.3163	IPI00930882	IPI00930882	yes	no		3	0.0075954	81.157
IMNAPIYIAEWQN(de)ITKNISED	2618.3163	IPI00930882	IPI00930882	yes	no		3	0.0075954	81.157
IMNAPIYIAEWQN(de)ITK	1903.9866	IPI00930882	IPI00930882	yes	no	2,3		8.7806E-06	175.66
IMESHPN(de)GTFSAK	1417.666	IPI00177214	IPI00177214	yes	no		2	0.0003652	157.56
IKVSN(de>VSCEASVSK	1506.7712	IPI0013556C	IPI0013556C	yes	no		2	0.0057274	114.59
IKN(de>TTNQIAIK	1355.8136	IPI0098598E	IPI0098598E	yes	no		2	2.7502E-05	166.7

IKN(de)ITDISQK	1158.6608	IPI0011929E	IPI0011929E	yes	no	2	0.020783	115.29
IKN(de)ATV/TQYQIK	1405.7929	IPI00221547	IPI00221547	yes	no	2	0.0075149	113.69
IKIMESH(de)PNGTFSK	1658.845	IPI00177214	IPI00177214	yes	no	2	0.000503	145.46
IKIDN(de)YSTQEIGR	1535.7944	IPI00122257	IPI00122257	yes	no	2,3	0.0008945	154.36
IKGEAEYQEIRNPN(de)GTVTVISR	2473.2925	IPI0031140E	IPI0031140E	yes	yes	3	0.0001777	115.63
IKFIEAGIYEVPIITDSGNPPKSN(de)JISIIR	3296.8384	IPI00323134	IPI00323134	yes	no	3,4	7.5863E-14	140.09
IKEQVVGIIAQNN(de)CSCEK	2176.0616	IPI00122592	IPI00122592	yes	yes	3	5.406E-05	176.49
IY(de)EGGDIPDFRKENSZYQVINWR	2898.4301	IPI0015331E	IPI0015331E	yes	yes	3	3.9765E-05	118.96
IITN(de)NSQTPIISPQEVVSCSPYAQGCDDGGFPYIAGK	3980.9288	IPI0013001E	IPI0013001E	yes	yes	4	7.7495E-18	122.06
IITHTIEGPSQN(de)VTIIQIPWQDPESWER	3414.7208	IPI0047319C	IPI0047319C	yes	no	3	1.9109E-15	112.26
IISQKN(de)SSQAR	1230.668	IPI00420867	IPI00420867	yes	no	2	0.0097875	115.29
IISQAPSTSPNMFTINN(de)ETGDIITVAAGIDREK	3599.8141	IPI00323134	IPI00323134	yes	no	3,4	1.173E-09	104.83
IQYYGN(de)FSR	1259.6299	IPI0026796E	IPI0026796E	yes	yes	2	0.0038739	135.99
IQVVYIHSNN(de)ITK	1640.925	IPI00123194	IPI00123194	yes	yes	2,3	6.7758E-29	213.99
IQTAEHN(de)JSGAER	1537.7849	IPI0040393E	IPI0040393E	yes	no	2	0.021041	152.07
IQQQSN(de)QSSQFIHSVER	2128.0661	IPI00876541	IPI00876541	yes	no	2,3	9.7794E-06	180.31
IIPHIEKPIQN(de)FTICFR	2125.1507	IPI00309214	IPI00309214	yes	yes	2,3,4	0.0012761	140.46
IIPAFN(de)TTSGIPYPR	1645.8828	IPI00127672	IPI00127672	yes	no	2	0.0075789	102.65
IINN(de)ITSIK	1014.6073	IPI0040001E	IPI0040001E	yes	no	2	0.0044261	152.97
IINKFN(de)SSSSSIEEK	1681.8523	IPI00338561	IPI00338561	yes	yes	2	4.3161E-50	242.19
IINDYVSN(de)QTQGMK	1722.8611	IPI0013563E	IPI0013563E	yes	no	2	2.8405E-10	187
IIN(de)TTDVYIIPSINPDGFER	2276.1689	IPI0013057E	IPI0013057E	yes	yes	2	0.0005762	111.83
IIN(de)QTIRENIKK	1468.8726	IPI0046006E	IPI0046006E	yes	no	2	0.0052273	128.85
IIN(de)QTIRENIK	1340.7776	IPI0046006E	IPI0046006E	yes	no	2	1.3695E-07	179.57
IIN(de)QTIR	856.51305	IPI0046006E	IPI0046006E	yes	no	2	1.3221E-10	187.34
IIN(de)QTADMIQIASK	1544.8232	IPI00126864	IPI00126864	yes	no	2	5.9389E-29	216.27
IIN(de)KSMEIIDER	1459.7705	IPI00112614	IPI00112614	yes	yes	2	0.0083079	114.24
IIN(de)ITFIDITR	1317.7656	IPI0034356E	IPI0034356E	yes	no	2	1.6591E-11	186.76
IIN(de)HSIIHK	1186.7186	IPI0040660E	IPI0040660E	yes	yes	2,3	0.0004778	167.67
IIN(de)ETIYENAK	1306.6769	IPI0015375E	IPI0015375E	yes	yes	2	1.1236E-07	177.83
IISPSAFHDGN(de)FSIIR	1999.0891	IPI0031051E	IPI0031051E	yes	no	2	0.0010949	126.07
IISPEEN(de)VTITCTAENQIER	2429.2108	IPI0012137E	IPI0012137E	yes	no	2	1.1997E-49	237.76
IIN(de)WTQGQTSQVIR	1684.9261	IPI0067465E	IPI0067465E	yes	no	2	1.7952E-287	242.91
IIN(de)FTSMDIYR	1484.7697	IPI0012518E	IPI0012518E	yes	no	2	4.9286E-09	177.42
IIGGIPVSGTFHN(de)FSGCISNVFVQR	2818.4589	IPI0011691E	IPI0011691E	yes	no	3	0.0002019	99.603
IIGVPSIEDIDEVIIHNIPDAIGVIFN(de)DSFSYQIK	3883.0295	IPI0017014E	IPI0017014E	yes	no	4	0.0016993	59.536
IIGGDEDAIRPQMQUIIDFETAIAN(de)ITIPQEK	3623.8505	IPI0039684C	IPI0039684C	yes	no	3	2.6413E-18	151.12
IIFAN(de)VSVR	1017.5971	IPI0017315E	IPI0017315E	yes	no	2	0.0070308	140.16
IIEYRN(de)TSSEYHIAR	1850.9275	IPI0011185E	IPI0011185E	yes	no	3	0.023783	95.631
IIEFDSTN(de)ASEGAQPPGKPYPPYSIAK	2876.4232	IPI0045943E	IPI0045943E	yes	yes	3	8.6079E-18	197.85
IIDIIPDGYPIQISCIPKEEN(de)ATIATYPEFGVIDIK	3932.0169	IPI00124221	IPI00124221	yes	no	3	3.4746E-05	75.887
IIDIDSCIDRSN(de)YSVIDITPVAIIPK	3000.5842	IPI0022507E	IPI0022507E	yes	no	3	0.0047965	69.98
IIASPNEENM(de)TEIISMR	1946.9441	IPI0032257E	IPI0032257E	yes	no	2,3	6.5789E-06	176.4
IIASN(de)ITETMR	1247.6544	IPI0013260C	IPI0013260C	yes	no	2	2.5187E-05	168.02
IIAN(de)ISYTIQIDGHR	1712.921	IPI0089497E	IPI0089497E	yes	no	2	0.0011695	130.98
IAENNEIISNIRDSVIN(de)ISESVEDGPR	3095.5735	IPI00114044	IPI00114044	yes	yes	3	4.9195E-10	153.59
IHYIYQNNFITEIPIESFQN(de)ATGIR	3093.5924	IPI0012229E	IPI0012229E	yes	yes	3,4	8.4932E-10	163.4
IHVAQPEN(de)DSHVAIK	1769.9424	IPI0085041E	IPI0085041E	yes	yes	2,3	7.8705E-05	158.11
IHRIN(de)ASIADIQSK	1564.8685	IPI0011691E	IPI0011691E	yes	no	2,3	1.0505E-14	194.48
IHN(de)GSEEAIQYK	1458.7103	IPI0038029E	IPI0038029E	yes	no	2	0.0034598	115.12
IHKDN(de)TTCYEFK	1682.8086	IPI0011906E	IPI0011906E	yes	yes	2,3	2.7748E-05	164.53
IHKDN(de)TTCYEFK	1554.7137	IPI0011906E	IPI0011906E	yes	yes	2	0.0019741	133.32
IHIIPSMNPDGYEVAQAQGN(de)MSGYIVGR	3056.4848	IPI0012826C	IPI0012826C	yes	yes	3	1.0882E-48	229.1
IHIGNYN(de)GTAGDAIR	1570.7852	IPI00310797	IPI00310797	yes	yes	2	0.026939	83.633
IHHWSSPKPICSIVN(de)SSIVVK	2387.2784	IPI00118011	IPI00118011	yes	yes	3	9.0701E-05	146.81
IHEISN(de)ETFR	1244.6149	IPI00321074	IPI00321074	yes	yes	2	0.0035632	136.96
IGYDPYANPPNYGNPDPIVIN(de)NTHR	2810.3412	IPI0031643C	IPI0031643C	yes	no	3	9.5287E-10	156.87
IGVTN(de)ASIVIFRPGSVR	1785.0261	IPI0065267E	IPI0065267E	yes	yes	3	0.0042967	116.19
IGVQMHPGQEIHN(de)FTITGR	2134.0742	IPI0011929E	IPI0011929E	yes	no	2,3,4	0.00054	125.28
IGVIEDHSN(de)R	1138.5731	IPI0012952E	IPI0012952E	yes	no	2	0.0019861	141.88
IGNFSEIATHN(de)QTFIK	1818.9264	IPI0085510E	IPI0085510E	yes	no	2	7.7732E-05	157.74
IGN(de)WTGEWPETEIVANIWMK	2373.1464	IPI00322497	IPI00322497	yes	yes	2,3	2.0428E-49	239.55
IGN(de)VTTWISSNPPVTFAAIWEEPVDVSGHK	3401.6568	IPI0022507E	IPI0022507E	yes	no	3	2.7131E-14	143.08
IGN(de)FTIAYSAPKPETADNQR	2095.0334	IPI0022919E	IPI0022919E	yes	no	2	0.0010421	128.38
IGN(de)FSEIATHNQTFIK	1818.9264	IPI0085510E	IPI0085510E	yes	no	2	7.7732E-05	157.74
IGISFNSITVMEN(de)GSIANVPHIR	2468.2846	IPI0012319E	IPI0012319E	yes	yes	2,3	5.1037E-15E	300.97
IGHTN(de)ASIMIFEVK	1558.8177	IPI0085815E	IPI0085815E	yes	yes	2	0.0005723	147.35
IGGWN(de)ITGPWAK	1298.6772	IPI0039684C	IPI0039684C	yes	no	2	0.0017659	149.41
IGAINSTISN(de)ESKEAFIDWAR	2321.1652	IPI0018735E	IPI0018735E	yes	yes	3	0.0040275	98.391
IGAINSTISN(de)ESK	1332.6885	IPI0018735E	IPI0018735E	yes	yes	2	5.315E-06	166.86
IGAIN(de)STISNESKEAFIDWAR	2321.1652	IPI0018735E	IPI0018735E	yes	yes	3	0.0040275	98.391
IGAIN(de)STISNESK	1332.6885	IPI0018735E	IPI0018735E	yes	yes	2	5.315E-06	166.86
IGAIN(de)NSIIIEDR	1539.8621	IPI0011551E	IPI0011551E	yes	no	2	3.9849E-21	205.3
IFTPVSSVPN(de)ITWSEISAIEIK	2543.3887	IPI0065272E	IPI0065272E	yes	no	3	0.0023905	89.668
IFIFN(de)QTGIEAKK	1507.8399	IPI00378224	IPI00378224	yes	yes	2	0.0024792	141.58
IFIFN(de)QTGIEAK	1379.7449	IPI00378224	IPI00378224	yes	yes	2	3.7975E-82	263.44
IFFVNP(de)APPYIWPAAHKNEIMINSSIMR	3184.6354	IPI0037869E	IPI0037869E	yes	no	4	0.015815	56.29
IETIIN(de)GTDR	1243.6772	IPI0011906E	IPI0011906E	yes	no	2	0.0027555	132.5
IEQMTMNIN(de)ITGPIAPYK	2130.0853	IPI0030999E	IPI0030999E	yes	no	2	0.0030162	92.633
IEPEHIQIQN(de)ISQEQIAQVATIATK	2801.4923	IPI00165807	IPI00165807	yes	no	3	2.6993E-05	101.75
IEN(de)ITTGTYYIHAQK	1688.8733	IPI0022242E	IPI0022242E	yes	yes	2	0.0011236	131.86
IEN(de)ISSTESGYTATITR	1841.9007	IPI0011196C	IPI0011196C	yes	no	2	8.3572E-77	254.82
IEIVPIIYDN(de)DSIFVQTDK	2221.1518	IPI0040554E	IPI0040554E	yes	yes	2	4.8985E-38	232.54
IEGITN(de)ETYR	1194.5881	IPI0011929E	IPI0011929E	yes	no	2	0.0044687	134.13
IEGIAN(de)VSR	1070.6084	IPI0011551E	IPI0011551E	yes	no	2	0.002338	140.78
IEDRFN(de)STIGPSEEQEKNWPGGPR	2799.3212	IPI0011551E	IPI0011551E	yes	no	3	1.1956E-08	131.56

IEDRFN(de)STIGPSEEQEK	1977.928	IPI0011551€	IPI0011551€	yes	no	2,3	3.848E-08	186.98
IEDGFHPDAVAWAN(de)ITNAIR	2209.0916	IPI0016573C	IPI0016573C	yes	no	2,3	1.9138E-20	213.03
IEAYFSIEGFPAEQN(de)ASNR	2142.0018	IPI0011431€	IPI0011431€	yes	yes	2,3	2.5088E-77	254.82
IEAVIPAEFFEVISSSQN(de)GSYHHR	2829.4086	IPI0034215€	IPI0034215€	yes	no		4 3.3596E-06	118.52
IDWIGN(de)CSGINDDSYGYR	2103.8956	IPI0012155C	IPI0012155C	yes	yes		2 7.9108E-29	223.5
IDVSQN(de)VSSDTQSCSTK	2098.8961	IPI0012076€	IPI0012076€	yes	no		2 6.5145E-95	272.48
IDVNSWIEN(de)FTK	1464.7249	IPI0062679€	IPI0062679€	yes	no		2 5.1651E-81	254.89
IDSFN(de)DSTFMIVYTPITPTQR	2546.2363	IPI0032257€	IPI0032257€	yes	no	2,3	2.0747E-06	163.45
IDRNPSPEIPQVGN(de)ISIK	2091.096	IPI0030899C	IPI0030899C	yes	yes	2,3	0.0002245	146.1
IDPPCTN(de)TTAPSNYINNPYVR	2406.1274	IPI0065853€	IPI0065853€	yes	no	2,3	1.7967E-13	199.97
IDNYS(de)TQEIGR	1294.6153	IPI00122257	IPI00122257	yes	no		2 0.005201	117.2
IDITDFEKN(de)SSFAQYQSFK	2267.0746	IPI00121312	IPI00121312	yes	yes		3 0.00097	164.01
IDIPVNTSIPNVTEIKEN(de)MTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.5903E-12	154.7
IDIPVNTSIPN(de)VTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.5903E-12	154.7
IDIPVNTSIPN(de)VTEIK	1751.9669	IPI00466371	IPI01026704	no	no		2 2.7513E-05	152.94
IDIPVN(de)TSIPNVTEIKENMTFGSTIVTNP	3271.701	IPI00466371	IPI01026704	no	no		3 2.5903E-12	154.7
IDIPVN(de)TSIPNVTEIK	1751.9669	IPI00466371	IPI01026704	no	no		2 2.7513E-05	152.94
IDGATVDTHHIPVN(de)VTIR	1957.0381	IPI00751912	IPI00751912	yes	yes		3 0.002808	107.61
IDFIVINE(de)TR	1218.6608	IPI0012581€	IPI0012581€	yes	no		2 0.0048149	133.05
IDETDCIGN(de)WTWQEGSQQTIK	2508.1227	IPI0012297€	IPI0012297€	yes	no	2,3	2.2077E-78	259.64
IDCYPDEHGASEAN(de)CSAR	2050.8109	IPI0084869€	IPI0084869€	yes	yes		2 4.2578E-08	183.77
IDAYNEAAVSIIN(de)SSTR	1822.9061	IPI0038029€	IPI0038029€	yes	yes		2 0.0001931	146.88
IDAPTNIQFVN(de)ETDRTVIVTWTPPR	2882.4927	IPI0011353€	IPI0011353€	yes	no	3,4	2.4901E-09	171.35
IDAPTNIQFVN(de)ETDR	1731.8428	IPI0011353€	IPI0011353€	yes	no	2,3	4.5798E-08	180.7
ICQN(de)ISK	861.43784	IPI00126184	IPI00126184	yes	yes		2 0.018067	147.34
ICN(de)ECSDGSFHISK	1652.6923	IPI0051536C	IPI0051536C	yes	no		2 0.0001112	155.57
ICHTHGWN(de)ETSEIMPPGAVFSCIYR	2961.336	IPI0012239€	IPI0012239€	yes	no		3 0.0007094	84.573
ICEGDRFCIIDVMSTGSSSVGN(de)ATR	2731.2364	IPI0074965€	IPI0074965€	yes	no		3 1.9802E-09	171.5
IAVTN(de)TTMTGTVIK	1448.7909	IPI00108041	IPI00108041	yes	yes		2 1.019E-08	182.02
IAVISGCKN(de)TTSAAMVHCIR	2188.0915	IPI0013121€	IPI0013121€	yes	yes	2,3	6.0428E-05	161.86
IAVDWESIGYN(de)ITR	1635.8257	IPI0012304C	IPI0012304C	yes	no		2 5.8164E-15	194.55
IATITCHIIPSDVSQVN(de)VSIIIWKPTFIK	3292.8257	IPI00466371	IPI01026704	no	no		3 0.0002273	79.382
IAPPSQGEVPPGPIPEAVIAIYN(de)STR	2759.4494	IPI00114457	IPI00114457	yes	yes		3 0.016582	57.694
IASAVQKN(de)ATSTK	1317.7252	IPI0040001€	IPI0040001€	yes	no		2 0.028542	92.65
IAQEGGAAAIIAN(de)NSVIIPSSR	2264.2488	IPI0012177€	IPI0012177€	yes	yes		3 0.0055647	78.708
IAPASN(de)VSHTVVIRPIK	1801.0574	IPI0046718C	IPI0046718C	yes	yes		2 6.1446E-27	216.01
IAPASN(de)VSHTVVIR	1462.8256	IPI0046718C	IPI0046718C	yes	yes		2 0.0015501	121.99
IAN(de)FSQSCTIYSGDDIVEAIPKPCPGCPR	3251.505	IPI0011495€	IPI0011495€	yes	no		3 5.625E-74	246.39
IAN(de)ETGGHGSGR	1251.5956	IPI0030923C	IPI0030923C	yes	no		2 0.0007931	150.26
IAITPAHIIIFIADN(de)HTEPAAHFR	2554.3445	IPI00230324	IPI00230324	yes	no		4 0.028261	61.87
IAISFPN(de)ITSDGYPVIYPTGWSSSDNVNCRPR	3582.7202	IPI00466371	IPI01026704	no	no	3,4	5.2367E-18	164.31
IAGGENN(de)CSGRVEIK	1602.7784	IPI0076010€	IPI0076010€	yes	no		2 0.033501	90.707
IAGGEN(de)NCSGRVEIK	1602.7784	IPI0076010€	IPI0076010€	yes	no		2 0.033501	90.707
IACIN(de)GTVIR	1115.6121	IPI0013480€	IPI0013480€	yes	no		2 0.0045447	133.89
I(de)VQAQYWHDPKESVYRNYISIFIADINQER	3694.8532	IPI0033131€	IPI0033131€	yes	no	3,4	8.3657E-06	102.21
I(de)VYIEHNIEKNSTKEEIIAAIEK	2796.5273	IPI0032119C	IPI0032119C	yes	no	2,3	2.9093E-117	284.07
I(de)VYIEHNIEKNSTK	1799.9781	IPI0032119C	IPI0032119C	yes	no		2 2.8042E-07	174.39
HYPGWVSMANAGKDTN(de)GSQFFITTVK	2912.3916	IPI0013568€	IPI0013568€	yes	yes		3 0.0001557	104.67
HYAN(de)ITNGMYR	1338.6139	IPI0022407€	IPI0022407€	yes	no	2,3	0.0030532	124.12
HVVIN(de)GSSFGADGFPYVQVIK	2233.1532	IPI00742377	IPI00742377	yes	no		3 0.0008199	105.89
HVTDMN(de)STIHIR	1535.7878	IPI0022344€	IPI0022344€	yes	yes	2,3	0.0010595	148.62
HVGDIGN(de)VTAGKDGVANVSIEDR	2322.1564	IPI0013058€	IPI0013058€	yes	yes	2,3	3.7589E-06	141.08
HVEDKFN(de)ETTQR	1502.7114	IPI00130654	IPI00130654	yes	no	2,3	0.0033461	122.33
HVCPVENWSYN(de)ESCPDPAEQGGPK	2843.1915	IPI0012826€	IPI0012826€	yes	yes		3 1.0678E-07	163.95
HTIEIAPN(de)STAR	1308.6786	IPI0062080C	IPI0062080C	yes	no		2 0.0079292	101.89
HTDDITSIN(de)NTIVNIR	1824.933	IPI00129304	IPI00129304	yes	yes	2,3	3.538E-77	256.98
HSVIWNAMIHPIQN(de)MTIK	2132.1023	IPI00111794	IPI00111794	yes	no	2,3	0.0001577	159.22
HSQQPIITYEKYN(de)VTDTPK	2261.1328	IPI0032241€	IPI0032241€	yes	yes	2,3	1.3844E-19	211.89
HSIEHFNN(de)NTDHSIFTIR	2318.0941	IPI0011495€	IPI0011495€	yes	no	2,3,4	5.4827E-11€	278.4
HPGNFSSISCDYFAVN(de)QSR	2184.9647	IPI0011597€	IPI0011597€	yes	yes	2,3	0.0005761	160.47
HPGN(de)FSSISCDYFAVNQSR	2184.9647	IPI0011597€	IPI0011597€	yes	yes	2,3	0.0005761	160.47
HNN(de)DTQHIWESDSNEFSVIADPR	2710.2008	IPI0012952€	IPI0012952€	yes	no	2,3,4	1.2347E-64	243.99
HN(de)QSCWCQTIAVR	1787.7832	IPI0033084€	IPI0033084€	yes	yes		2 0.0013099	133.25
HN(de)ITITQGK	1010.5509	IPI0012835€	IPI0012835€	yes	no		2 0.0082428	136.96
HMN(de)SSEQAHTATMIIDTIEEGAFVIADNIIIEPTR	3753.7978	IPI0087655€	IPI0087655€	yes	no		4 0.0016551	57.347
HIVFWN(de)SSNPK	1327.6673	IPI00130752	IPI00130752	yes	no		2 0.011303	103.34
HISN(de)DTTPESTMTVGQAR	2044.9484	IPI0087630€	IPI0087630€	yes	yes		3 0.0010949	114.29
HISFGEDYPGIVNPIDHTN(de)VTAPQASMMFQYFVK	3852.828	IPI00132454	IPI00132454	yes	no	3,4	3.8184E-20	143.19
HIN(de)ITTSVAGGFR	1484.81	IPI0085041€	IPI0085041€	yes	yes	2,3	4.9947E-29	216.54
HIN(de)ASNPSEPATIIIFTAAR	2009.033	IPI00421157	IPI00421157	yes	yes	2,3	2.8416E-95	273.46
HIIEN(de)ATASVSEAEK	1753.8959	IPI0039684C	IPI0039684C	yes	no	2,3	8.2947E-20	211.7
HIIEN(de)ATASVSEAEK	1625.8009	IPI0039684C	IPI0039684C	yes	no	2,3	4.2016E-39	232.78
HHAAYVNNIN(de)ATEEKYHEAIAK	2522.2302	IPI0010910€	IPI0010910€	yes	yes		3 1.7522E-13	193.8
HGQIIKN(de)FTIIQGGPPGPR	1972.1007	IPI00129304	IPI00129304	yes	yes		3 0.0004057	142.54
HGNIYDIKPIGIN(de)DTIVSVGEYTYIR	3112.587	IPI00308971	IPI00308971	yes	yes		3 3.4413E-06	103.03
HGHFTGFN(de)GSTIR	1429.6851	IPI0011798€	IPI0011798€	yes	yes	2,3	0.010956	98.337
HGFYCYIIGSTISTFTDAN(de)HTCTNEK	3036.3382	IPI0012618€	IPI0012618€	yes	yes		3 4.1945E-56	243.23
HFKGQTQN(de)YSTIIIEASER	2350.1553	IPI0012466€	IPI0012466€	yes	no		3 3.0078E-19	208.49
HFFN(de)VSDEIAIVTIVK	1830.988	IPI00466371	IPI01026704	no	no		2 0.021426	86.005
HEEGHMINC(de)TCFGQGR	1931.7825	IPI0011353€	IPI0011353€	yes	no	2,3	0.001633	128.76
HDYIIIPEGAITN(de)TTR	1812.937	IPI00121421	IPI00121421	yes	no		2 0.0080354	100.43
HAN(de)WTITPIK	1179.64	IPI0031735€	IPI0031735€	yes	yes		2 0.0072407	127.42
HAEISFVFITDGVVTGN(de)DSIEESVHSMR	2976.3924	IPI00621027	IPI00621027	yes	yes		3 8.2429E-24	174.19
GYN(de)SSQDIPSIVDFVK	1880.952	IPI0012466€	IPI0012466€	yes	yes		2 7.6783E-134	294.05
GYITSFEMFN(de)STFK	1670.765	IPI00262024	IPI00262024	yes	no		2 2.7394E-78	259.1
GYIITINFTKN(de)TTR	1640.8886	IPI0046921€	IPI0046921€	yes	yes		2 5.1472E-114	283.82



GYIITIN(de)FTKNTTR	1640.8886	IPI0046921E	IPI0046921E	yes	yes		2	5.1472E-11	283.82
GYIITIN(de)FTK	1168.6492	IPI0046921E	IPI0046921E	yes	yes		2	2.3906E-31	218.49
GWIN(de)GSIVGFYK	1339.6925	IPI0013458E	IPI0013458E	yes	no		2	5.3258E-19	197.07
GVTSVSQIFHSPDIAIRDTYVN(de)ASQSIYGSSPR	3551.7645	IPI00122977	IPI00122977	yes	no	3,4	1	1.2937E-09	106.28
GVTNDIISVQGNTGPSWIN(de)KTEK	2457.25	IPI0034468E	IPI0034468E	yes	yes	2,3	8	2.4442E-07	142.23
GVTHIN(de)ISGIKMPR	1521.845	IPI0011906E	IPI0011906E	yes	yes		2	0.044569	119.62
GVTHIN(de)ISGIK	1137.6506	IPI0011906E	IPI0011906E	yes	yes	2,3	0	0.000838	153.74
GVSSSEN(de)FTSPVMEFWERR	2244.027	IPI0046665E	IPI0046665E	yes	no		3	0.0022583	112.17
GVSSSEN(de)FTSPVMEFWER	2087.9259	IPI0046665E	IPI0046665E	yes	no	2,3	9	7.201E-09	191.47
GVQIIVFPEDGIHGFN(de)FTR	2145.1007	IPI0032137E	IPI0032137E	yes	no	2,3	7	9.059E-38	231.77
GVN(de)VTMPSQPGVPPISSTQIQIDPAIQEFQIVDISRR	4017.0994	IPI0051536C	IPI0051536C	yes	no		4	0.017353	49.069
GVN(de)VTMPSQPGVPPISSTQIQIDPAIQEFQIVDISR	3860.9982	IPI0051536C	IPI0051536C	yes	no		3	4.5245E-26	139.85
GVIPGEDWTVFQSN(de)HSTYEPVIAK	2786.3915	IPI0040418E	IPI0040418E	yes	no	2,3	0	0.0003726	92.01
GVIMVGN(de)ETTYEDGHGARKNITDIVEGAK	3073.5139	IPI0064918E	IPI0064918E	yes	no		3	1.0093E-07	118.37
GVIMVGN(de)ETTYEDGHGAR	1904.8687	IPI0064918E	IPI0064918E	yes	no	2,3	0	0.0009472	137.73
GVHFSPAASGITTSTVQVQGIPEYAN(de)YTFTVK	3369.6881	IPI0012022E	IPI0012022E	yes	yes		3	0.0016935	61.538
GVFITNE(de)TGQPIIGK	1572.8512	IPI0011196C	IPI0011196C	yes	no		2	2.8561E-11	192.65
GVENDVFIRYPNN(de)GSIVWVK	2263.1386	IPI0084869E	IPI0084869E	yes	yes	2,3	0	0.0004051	135.49
GVDSCHGDSGGAFQVFN(de)VTVPK	2445.1383	IPI0065367E	IPI0065367E	yes	no		3	0.0027611	79.942
GVAVTN(de)TSQIGFR	1348.7099	IPI0047108E	IPI0047108E	yes	no		2	2.0001E-44	204.85
GV(de)IMVGNETTYEDGHGARKNITDIVEGAK	3073.5139	IPI0064918E	IPI0064918E	yes	no		3	1.0093E-07	118.37
GTFTDCAIANM(de)TQQIR	1825.8451	IPI00621027	IPI00621027	yes	no		2	5.2499E-94	268.61
GTDPSPSPAPATPPAPGAEISYIN(de)HTFR	2950.4461	IPI00762091	IPI00762091	yes	yes		3	0.0001354	79.177
GTCEQGSPSIVTPPKDIWN(de)VTGAK	2454.2213	IPI00652107	IPI00652107	yes	no		3	6.245E-05	114.4
GTAGNAIMDGASQIVGEN(de)R	1859.8796	IPI0027907E	IPI0027907E	yes	yes	2,3	1	1.2498E-94	269.61
GSTQYIENIGFN(de)MSK	1687.7876	IPI0011610E	IPI0011610E	yes	yes		2	1.6845E-05	156
GSPGN(de)ASQGSIIHSPQIAIQADPR	2537.2735	IPI00114044	IPI00114044	yes	yes	2,3	0	0.0001846	106
GSNFN(de)ISKTDNIEECQK	1982.9004	IPI00113057	IPI00113057	yes	yes	2,3	5	6.394E-08	184
GSNFN(de)ISK	865.42938	IPI00113057	IPI00113057	yes	yes		2	0.017251	140.45
GSN(de)FTAICVIK	1208.6223	IPI0012015E	IPI0012015E	yes	yes		2	0.001262	142.97
GSIQSANDISSQTQGFQHSMDN(de)ISAQIQTVR	3460.6641	IPI00330594	IPI00330594	yes	yes	3,4	8	7.53E-36	205.12
GSIN(de)VSYNIGPGFTGSEYSR	2103.9861	IPI0011304E	IPI0011304E	yes	no		2	0.0004992	113.51
GSEVEDEDIEIFN(de)TSVQIRPPSTAPGPETAALIER	3800.8381	IPI00381357	IPI00381357	yes	no	3,4	5	1.388E-30	202.58
GSAIPHPN(de)ATWEIK	1606.8104	IPI0011929E	IPI0011929E	yes	no		2	0.01801	90.725
GQTQNYST(de)IIIEEASER	1937.933	IPI0012466E	IPI0012466E	yes	no	2,3	8	9.989E-49	239.75
GQTGIGFIYASGIVN(de)SSQAK	2054.0433	IPI0013114E	IPI0013114E	yes	no	2,3	1	1.3552E-49	236.96
GQAQSDAAGIPGAESRN(de)DSIPGAGSEADGIEGK	3111.4341	IPI00317487	IPI00317487	yes	yes		3	1.0861E-09	107.31
GPNIKQC(de)VDGNWTTIPVCIEEER	2714.2792	IPI0013001C	IPI0013001C	yes	no		3	0.0019986	98.543
GPIANPIWN(de)VTGFTGR	1698.8842	IPI0012304C	IPI0012304C	yes	no		2	0.0027011	114.63
GPDISN(de)CTSHWVNQIAQK	2053.964	IPI0087655E	IPI0087655E	yes	no		2	0.0012405	119.8
GPDGTEGISSTVN(de)GSTDPSAVTDIR	2432.1303	IPI0046942E	IPI0046942E	yes	no		2	7.6588E-08	166.65
GPCSHICIINYN(de)R	1602.7395	IPI0011906E	IPI0011906E	yes	yes		2	3.7325E-33	223.31
GNYGWQAGN(de)HSAFWGMTIDEGIR	2566.1448	IPI0011545E	IPI0011545E	yes	no		3	1.4865E-06	160.67
GNYDFVEAMIVNN(de)HTSIDVER	2422.1223	IPI0040358E	IPI0040358E	yes	yes	2,3	0	0.000188	155.79
GN(de)TTAIDKEIAR	1287.6783	IPI0010853E	IPI0010853E	no	no	2,3	5	3.103E-14	188.48
GN(de)SSIYPVSPSIQQIVIEK	2157.1681	IPI0098598E	IPI0098598E	yes	no		2	0.0015408	101.53
GN(de)QSSQWIYEAMAK	1611.7351	IPI0013779E	IPI0013779E	yes	yes		2	0.0019953	121.13
GN(de)ITEYQCHQYITK	1753.8094	IPI0012239E	IPI0012239E	yes	no		2	3.5213E-08	178.23
GN(de)ISTEKFEVIEIK	1492.7773	IPI00466371	IPI01026704	no	no		2	0.010161	107.65
GN(de)HSIFGIEVATIGQGPDPCPSVNER	2653.2555	IPI0045943E	IPI0045943E	yes	yes		3	6.0263E-18	201.13
GN(de)GSCVCHAGWQGIR	1657.7202	IPI0098726E	IPI0098726E	yes	no		2	0.0083406	101.62
GMVIDENSNN(de)ITGAVISVTGINHDVTSGEHGDYFR	3717.7329	IPI0012826C	IPI0012826C	yes	yes		3	8.0817E-19	141.23
GMNYN(de)SSVVK	1097.5175	IPI0041628E	IPI0041628E	yes	yes		2	0.022949	104.79
GKNN(de)QTECFNHVR	1602.7321	IPI0012466E	IPI0012466E	yes	no		2	0.0024436	139.48
GKIYWTGDGNISMANMDG(de)SNHTIIFSGQK	3199.4703	IPI0011906E	IPI0011906E	yes	yes		3	1.0612E-12	146.5
GKIYWTGDG(de)DNISMANMDGSNHTIIFSGQK	3199.4703	IPI0011906E	IPI0011906E	yes	yes		3	1.0612E-12	146.5
GIWKIPFSPENTREED(de)FYVNETSTVK	3085.5033	IPI0011610E	IPI0011610E	yes	yes		3	0.0045894	77.287
GIVSGGVYNSHVGCIPYTIPPCHEHVN(de)GSRPPCTGEGDTPR	4430.0379	IPI00113517	IPI00113517	yes	yes		4	0.0002026	54.596
GIVIGPI(de)HKNQKDEINETDIK	2360.27	IPI0093088E	IPI0093088E	yes	no		3	0.014684	93.371
GISYQIIGN(de)HSK	1315.6884	IPI00623114	IPI00623114	yes	no		2	0.0013357	128.68
GISPGN(de)YSVR	1048.5302	IPI0012835E	IPI0012835E	yes	no		2	0.012091	113.69
GIRGPN(de)FTSPASITFTTGKPPQDIEAK	2942.5502	IPI0045841E	IPI0045841E	yes	no		3	0.011806	67.33
GINIT(de)EDTYKPR	1405.7201	IPI0011980E	IPI0011980E	yes	yes		2	1.086E-32	219.43
GIMVGN(de)GSVIGVVQAVDAETGK	2100.0885	IPI0034215E	IPI0034215E	yes	no	2,3	5	2.73E-297	353.39
GIMIIN(de)DTQHFSNNVKGIEGQFYR	2893.4545	IPI00312711	IPI00312711	yes	no		3	0.000488	104.03
GIMIIN(de)DTQHFSNNVK	1942.9935	IPI00312711	IPI00312711	yes	no	2,3	6	3.743E-79	264.03
GIIN(de)ATISVAEINHPVTTYK	2140.1528	IPI0013057E	IPI0013057E	yes	yes	2,3	0	0.0005	113.49
GIIGISN(de)ATYWHIPDTAYPGIYR	2690.3857	IPI00458077	IPI00458077	yes	yes		3	6.6605E-10	183.74
GIFPDGSHEISGN(de)TSITPDK	2070.9858	IPI0089497E	IPI0089497E	yes	no		2	0.0004922	113.73
GIAN(de)ISNFIR	1103.6087	IPI0012915E	IPI0012915E	yes	no		2	0.0003283	169.93
GIAEVTEN(de)VTEGGVTK	1602.8101	IPI00130271	IPI00130271	yes	no		2	4.7846E-49	239.58
GHVDPAN(de)DTFDIDPR	1667.754	IPI00453501	IPI00453501	yes	no	2,3	0	0.0026862	115.12
GHTDRCDEAQAIQVWN(de)DTHPEVISQKPFDK	3520.643	IPI0010800E	IPI0010800E	yes	no		4	0.0095992	64.845
GHIIAQVATNPQGITGTGN(de)TTSEMDPShRK	3230.6102	IPI0032137E	IPI0032137E	yes	no	3,4	1	1.661E-13	143.47
GHIIAQVATNPQGITGTGN(de)TTSEMDPShR	3102.5153	IPI0032137E	IPI0032137E	yes	no	3,4	3	3.9209E-13	165.47
GHCIN(de)QTQNIQSSK	1613.758	IPI0098788E	IPI0098788E	yes	yes		2	0.0010779	137.46
GHFYNN(de)ISDVR	1369.6415	IPI0013556C	IPI0013556C	yes	no		2	0.0073012	110.08
GHAIGISCQSEN(de)GTAPITYHIMK	2484.189	IPI00406901	IPI00406901	yes	no		3	2.4991E-06	135.81
GHAHIAIVNHDSYN(de)FSHR	2145.0253	IPI0013336E	IPI0013336E	yes	no		3	4.0181E-21	213.51
GGIN(de)ITAVTVTAENDHTVAFIGTSDGR	2715.3464	IPI0040574E	IPI0040574E	yes	no		3	0.0001083	98.121
GFQWVTGDN(de)HTSYSR	1753.7808	IPI0012942E	IPI0012942E	yes	yes		2	1.2076E-06	166.04
GFN(de)ATYHVR	1063.5199	IPI0041102E	IPI0041102E	yes	yes		2	0.01597	123.86
GFGVAFVGN(de)YTGSIPNEAAINTVR	2453.2339	IPI00165807	IPI00165807	yes	no		3	2.0188E-06	127.49
GENPSQYGITAFNHPIN(de)ITK	2200.0913	IPI00112614	IPI00112614	yes	yes	2,3	0	0.0002383	125.79
GEIQSEN(de)SSITISSNR	1807.8548	IPI00466371	IPI01026704	no	no	2,3	1	1.3699E-13	287.57
GEIN(de)STIFSSRPK	1434.7467	IPI0046006E	IPI0046006E	yes	no	2,3	5	9.797E-18	197.36

GECYYTN(de)GTQR	1347.5514	IPI0011091C	IPI0011091C	yes	no	2	0.032818	88.338
GDTVARIHEFYDDN(de)NTWGIDR	2703.2677	IPI0084869C	IPI0084869C	yes	yes	3	0.0009967	98.443
GDTHTQIEGIQFN(de)ITQTSEADHDK	2795.3726	IPI00123924	IPI00406302	no	no	3,4	2.8473E-12	281.29
GDPSIISVN(de)GTDFTFR	1724.837	IPI00463492	IPI00463492	yes	yes	2	7.9916E-09	188.44
GDN(de)QSPIEHTK	1337.6575	IPI0022189C	IPI0022189C	yes	yes	2	4.1772E-14	190.85
GDHHQISHYN(de)ITGVR	1732.8394	IPI0033820E	IPI0033820E	yes	no	2,3	1.2864E-06	165.49
GDGPFTVFPHADIIISN(de)MSQDEIAR	2715.2963	IPI0098726E	IPI0098726E	yes	no	3	1.4932E-05	112.36
GDEKENITA(de)EAIDISIK	1844.9367	IPI0012472E	IPI0012472E	yes	no	2,3	6.0486E-05	172.66
GDDIYTNV(de)TVSIVEAIVGFEMDITHIDGHK	3287.602	IPI00320241	IPI00320241	yes	yes	4	5.7831E-12	129.43
GCKDNA(de)TDSVPIR	1431.6776	IPI0011906C	IPI0011906C	yes	yes	2,3	0.0027502	126.71
GCADYCNQ(de)TITKR	1585.6977	IPI0098726E	IPI0098726E	yes	no	2	1.6376E-13	183.89
GAIQIPTVSFSHEESN(de)TTAIAEFGEYIRK	3194.5884	IPI0022407C	IPI0022407C	yes	yes	3,4	6.1023E-06	102.21
GAIQIPTVSFSHEESN(de)TTAIAEFGEYIR	3066.4934	IPI0022407C	IPI0022407C	yes	yes	3	1.8588E-11	140.2
GAIDIMIQVN(de)MTPGHSSAPPK	2163.0816	IPI0022407C	IPI0022407C	yes	yes	2,3	3.517E-05	171.13
GAGEVSPAESHSSKPTN(de)ISAK	1965.9756	IPI0023071E	IPI0023071E	yes	no	2,3	0.0019479	104.03
GAFVSKNPCN(de)ITREDYAPIVK	2378.2053	IPI0030796E	IPI0030796E	yes	yes	2,3	0.0002096	147.09
GAFVSKNPCN(de)ITR	1462.7351	IPI0030796E	IPI0030796E	yes	yes	2	0.016163	100.55
GAFISN(de)FTMTVNGMTFTSSIK	2253.081	IPI0097043E	IPI0097043E	yes	no	2	6.3921E-05	153.36
GAFFPIKEDN(de)WSIPNR	1889.9424	IPI0013556C	IPI0013556C	yes	no	2	0.0063655	111.22
GAAAPSAPHWN(de)ETAEK	1635.7641	IPI0064828E	IPI0064828E	yes	no	2	0.0014947	130.27
FVPNSNMN(de)FTGQAYSGR	1888.8526	IPI0010853E	IPI0010853E	no	no	2,3	4.5244E-05	166.57
FVN(de)STGYITEAEK	1457.7038	IPI00153187	IPI00153187	yes	yes	2	6.363E-06	165.34
FVHVN(de)TSAIK	1227.6976	IPI0015363C	IPI0015363C	yes	yes	2	0.020574	95.477
FTQDAYSAVVKEN(de)STEAR	2014.9596	IPI00623114	IPI00623114	yes	no	2,3	0.0025848	132.79
FTIKPIGIIIQISGDIEDIEPAIN(de)K	2883.5997	IPI0016573C	IPI0016573C	yes	no	3	2.2674E-18	167.61
FTFTSHTPGEHQICIHSN(de)STK	2428.123	IPI0047368C	IPI0047368C	yes	no	2,3	6.7924E-14	202.16
FTFTSHTPGDHQICIHSN(de)STR	2442.1135	IPI0015346E	IPI0015346E	yes	no	2,3	7.1542E-28	216.3
FTECCHEERPIN(de)TSAIK	2090.9514	IPI0087623C	IPI0087623C	yes	no	2,3	0.0033617	130.01
FTCN(de)QTTDVIHHSK	1775.8876	IPI0031950E	IPI0031950E	yes	yes	2,3	4.7202E-13	287.85
FTAPDTIFAN(de)GSVYPPNEGFCPCR	2716.205	IPI01008227	IPI01008227	yes	no	2,3	7.3806E-07	168.68
FSWNNITNSIDIANISADFQGRPVDDPTGAFAN(de)GSITFK	4200.0189	IPI0045943C	IPI0045943C	yes	yes	4	3.2872E-17	119.54
FSWNN(de)ITNSIDIANISADFQGRPVDDPTGAFANGSITFK	4200.0189	IPI0045943C	IPI0045943C	yes	yes	4	3.2872E-17	119.54
FSVN(de)QTTIITHEK	1516.7886	IPI0084869C	IPI0084869C	yes	yes	2	3.9486E-10	181.67
FSTEIGYN(de)GTR	1243.5833	IPI0013401C	IPI0013401C	yes	yes	2	6.2661E-08	180.24
FSPPVVN(de)VTWIR	1413.7769	IPI0011080E	IPI0011080E	yes	no	2	0.017381	92.856
FMSDITYDIQDVIADVGIKIDFTN(de)QSDFADTTKDTPIITVIHK	4918.411	IPI0011610E	IPI0011610E	yes	yes	4,5	2.9972E-22	111.67
FMSDITYDIQDVIADVGIKIDFTN(de)QSDFADTTK	3699.7138	IPI0011610E	IPI0011610E	yes	no	3	7.8521E-45	220.98
FSHN(de)GTCAAEGK	1277.5459	IPI0032067E	IPI0032067E	yes	yes	2	0.0032488	117.2
FSEIIVNN(de)ATEEIIVK	1817.9775	IPI0032119C	IPI0032119C	yes	no	2	0.0014197	128.64
FSEIATVHN(de)HSIPK	1578.8154	IPI00124697	IPI00124697	yes	no	2	1.9259E-06	163.99
FSDGIESN(de)RSTHFVVK	1851.8751	IPI00131091	IPI00131091	yes	no	2,3	0.0026671	120.87
FSDGIESN(de)R	1023.4621	IPI00131091	IPI00131091	yes	no	2	0.0056377	145.25
FSATEVPEKGEVSP(de)AEHSSKPTNISAK	2954.4621	IPI0023071E	IPI0023071E	yes	no	3,4	1.1893E-11	153.52
FQSAAGAIQEAASEAYIVGIFEDTN(de)ICAIHAK	3436.6973	IPI0098957E	IPI0098957E	yes	no	3	0.030568	50.593
FQN(de)FSMATDQR	1343.5928	IPI0012817E	IPI0012817E	yes	no	2	1.6115E-05	169.89
FQISPIQFSPEEVIGMVIN(de)YSR	2681.3523	IPI0012334C	IPI0012334C	yes	no	2,3	2.6155E-65	252.1
FQIIN(de)FSSSEIK	1411.7347	IPI0085672C	IPI0085672C	yes	no	2	2.4302E-08	182.89
FPVPFQKENV(de)TATIVEIGR	2144.163	IPI00134691	IPI00134691	yes	yes	2,3	5.9878E-19	206.21
FN(de)VSIIYGR	1067.5764	IPI0032067E	IPI0032067E	yes	yes	2	0.0069093	140.49
FN(de)STEYQVVTR	1342.6517	IPI0011906C	IPI0011906C	yes	no	2	3.2107E-33	214
FN(de)ITETPEADHQQFGNIIQISQPEDQDQINIGNAMFIEK	4601.202	IPI0013183C	IPI0013183C	yes	no	4	2.8791E-12	84.787
FN(de)ISIQK	848.4756	IPI0079846E	IPI0079846E	yes	no	2	0.030988	114.5
FN(de)GSVSFFR	1059.5138	IPI0055116E	IPI0055116E	yes	no	2	0.0023326	147.74
FN(de)ETRDTITSIVSDINVR	2079.0596	IPI0099093C	IPI0099093C	yes	yes	3	0.0020767	127.29
FN(de)ETIHR	915.45626	IPI00471081	IPI00471081	yes	yes	2	0.030364	136.8
FN(de)DTEVIQR	1120.5513	IPI0032137E	IPI0032137E	yes	no	2	0.02577	110.39
FMGIPTKDDNIEHYKN(de)STVMAR	2566.2308	IPI0012392E	IPI0012392E	yes	no	3	0.0094112	81.854
FKDNTPNAN(de)ATER	1476.6957	IPI0012513E	IPI0012513E	yes	no	2	0.019233	98.592
FIWSEPQN(de)CSATK	1566.7137	IPI00118987	IPI00118987	yes	no	2	0.0057294	107.46
FISYN(de)VTR	998.51853	IPI00453707	IPI00453707	yes	yes	2	0.026205	113.18
FIQSAEFFN(de)YTVR	1620.7936	IPI0012740E	IPI0012740E	yes	yes	2,3	9.4335E-20	203.32
FINYN(de)QTVSR	1240.62	IPI0022693C	IPI0022693C	yes	no	2	2.4589E-22	209.97
FINFFVGNTIN(de)SSYPPGYSIHSISVR	2915.4606	IPI0013042C	IPI0013042C	yes	no	3	0.0002375	92.932
FIN(de)ISSTGIR	1106.6084	IPI0013189E	IPI0013189E	yes	yes	2	0.0093069	122.7
FIKGNPN(de)KIQCVDGNWTTIPVCIEEER	3215.6107	IPI0013001C	IPI0013001C	yes	no	3	5.8774E-05	89.201
FIHVSHIN(de)ASMK	1382.7129	IPI0012021C	IPI0012021C	yes	yes	2	0.0090991	122.39
FIGITPFIN(de)YTR	1440.7765	IPI0032372E	IPI0032372E	yes	yes	2	0.016961	93.258
FIEYVTSECHFYN(de)GTQHVR	2386.0801	IPI0047458C	IPI0047458C	yes	no	3	0.0003568	166.35
FIEAGIYEVPIIITDSGNPPKSNIS(de)IIR	3055.6594	IPI00323134	IPI00323134	yes	no	3,4	3.4331E-11	139.51
FHVNY(de)TQPIVAVK	1514.8245	IPI00123704	IPI00123704	yes	no	2	0.0050832	109.44
FHVHQPVTQPFIVQTN(de)TTVK	2320.2328	IPI00658311	IPI00658311	yes	no	2,3,4	3.6101E-40	233.79
FHSDINI(de)SESIIPAVIEK	2011.0626	IPI00831484	IPI00831484	yes	yes	2,3	1.4907E-05	178.75
FGYIIHTDN(de)R	1234.6095	IPI0047520E	IPI0047520E	yes	no	2	0.0016929	148.32
FGTCSQICN(de)NTK	1428.6126	IPI0011906C	IPI0011906C	yes	yes	2	2.4701E-14	189.3
FGN(de)ETFIHIDNGR	1631.8056	IPI0017035E	IPI0017035E	yes	yes	2	0.0022241	119.31
FGHSPIIN(de)ITGGISHASDVVIYHQHKQPEVTNPNCDR	4022.981	IPI0011906C	IPI0011906C	yes	yes	4	0.031955	45.748
FGHSPIIN(de)ITGGISHASDVVIYHQHK	2826.4565	IPI0011906C	IPI0011906C	yes	yes	3,4,5	4.8866E-08	153.36
FGFEGN(de)YSIIVQHASSGANK	2125.0229	IPI0031748E	IPI0031748E	yes	no	2,3	6.8982E-11	280.81
FFQAFTKN(de)GSGATIPGAGANVQTIR	2552.3136	IPI00223231	IPI00223231	yes	no	3	0.0012466	82.267
FFN(de)FSWR	1002.4712	IPI0039684C	IPI0039684C	yes	no	2	0.020216	144.38
FFN(de)DSIVDPVDSEWFGFYR	2339.0535	IPI0033131E	IPI0033131E	yes	no	2,3	1.8674E-77	257.2
FDGEPDQSQIN(de)ITWFIK	2068.9564	IPI0062526C	IPI0062526C	yes	no	2	0.0037056	109.36
FDEFFSQGCAPGYEKN(de)STICDICIGPIK	3252.4566	IPI00987951	IPI00987951	yes	no	3,4	1.9908E-14	190.85
FDAAGTSVHGGVPQN(de)GSICAHIPMIK	2663.2948	IPI0031553E	IPI0031553E	yes	yes	3	3.7265E-08	161.02
FCNIVPTEHCFIGN(de)GTEYR	2313.0307	IPI00227857	IPI00227857	yes	yes	3	0.0006659	119.08
FAVESIVPSSISIMHSPDAQN(de)MSEVSISPMEISTFR	4019.9319	IPI00114044	IPI00114044	yes	yes	3,4	6.1784E-10	87.772

FAQPQWHIIHINGTFSN(de)ETEPDTEPCVDGWVYDR	4057.833	IPI0022634€	IPI0022634€	yes	no		4	0.0006869	63.427
FAQPQWHIIHIN(de)GTFSNETEPDTEPCVDGWVYDR	4057.833	IPI0022634€	IPI0022634€	yes	no		4	0.0006869	63.427
FANEYPN(de)ITR	1223.5935	IPI0013057€	IPI0013057€	yes	yes		2	0.0078763	125.97
FAIKNEDSN(de)FTIINHNDNTANITVK	2832.4042	IPI0013818€	IPI0013818€	yes	yes		3	2.0356E-07	161.47
FAIIKDYR(de)PSAGNNSIYQDVTVFK	2745.4126	IPI0032246€	IPI0032246€	yes	no		3	8.6341E-06	126.25
FAEIN(de)GSAICSYNIKPSEYTITSK	2692.3054	IPI00421237	IPI00421237	yes	no		3	0.0001175	111.4
F(de)IFKNQTIHVIYGPR	2074.1364	IPI0012297€	IPI0012297€	yes	no	2,3,4		4.2134E-27	218.43
F(de)APPQPAEPWSFVKNTTSYPPMCSQDAVGGQVISEIFTNR	4453.1147	IPI0038728€	IPI0038728€	yes	yes		4	5.7495E-05	65.375
EYHTIDDHCVYN(de)STHIGIQR	2457.1132	IPI0012785€	IPI0012785€	yes	yes		3	3.1594E-19	203.99
EYEGAVYPDND(de)TTDFQR	1903.8224	IPI00605187	IPI00605187	yes	no		2	3.823E-05	170.78
EWN(de)GTYHCIFR	1481.651	IPI00876541	IPI00876541	yes	no		2	1.6318E-11	186.87
EWIPIN(de)HSVNSVVVR	1747.937	IPI0022475€	IPI0022475€	yes	yes		2	6.9702E-06	160.18
EVTVIGVATAPTQVISNGIPVSN(de)FTYSPDNK	3217.6507	IPI0011196€	IPI0011196€	yes	yes		3	0.0001271	76.439
EVNSQIDNNGCSTQEVN(de)ITEIQSK	2706.2403	IPI0012322€	IPI0012322€	yes	yes	2,3		2.8379E-15€	299.51
EVNSKIDNNGCSTQEVN(de)ITEIQSK	2706.2767	IPI0027126€	IPI0027126€	yes	yes		3	1.9456E-06	115.39
EVN(de)KTCEAIFK	1450.749	IPI0011511€	IPI0011511€	yes	yes		2	9.333E-09	176.18
EVN(de)ITVIDRK	1185.6717	IPI0011138€	IPI0011138€	yes	no		2	0.018238	120.06
EVHFFVNA(de)SDVDSVK	1691.8155	IPI0031004€	IPI0031004€	yes	yes		2	0.0047681	109.07
ETYIETN(de)YTIK	1373.6715	IPI0012015€	IPI0012015€	yes	yes		2	0.0057433	113.22
ETIVTIFDN(de)R	1206.6245	IPI0012723€	IPI0012723€	yes	no		2	0.0018436	152.07
ETIKNQTFGGAETVPQEATATFN(de)STAIKK	3081.5619	IPI00117424	IPI00117424	yes	no		3	0.0010451	75.868
ETIKN(de)QTFGGAETVPQEATATFNSTAIKK	3081.5619	IPI00117424	IPI00117424	yes	no		3	0.0010451	75.868
ETAEYAAAN(de)ITQAVFDYFEDYFAMEYAIPIK	3409.5377	IPI0013458€	IPI0013458€	yes	no		3	0.02616	51.119
ESSEHPWK(de)WTDNTEYNNTIPIRGEER	3187.4595	IPI0027643€	IPI0027643€	yes	yes		3	0.0003342	108.13
ESQTIGDQCVYNSTHIGFQREN(de)GTFSK	3102.4101	IPI0011813€	IPI0011813€	yes	yes		3	0.0003818	85.224
ESQTIGDQCVYN(de)STHIGFQRENGTFSK	3102.4101	IPI0011813€	IPI0011813€	yes	yes		3	0.0003818	85.224
ESQTIGDQCVYN(de)STHIGFQR	2339.0601	IPI0011813€	IPI0011813€	yes	yes	2,3		1.3004E-37	228.08
ESQIN(de)ITVMAKPTNWIEGTR	2287.1631	IPI0031140€	IPI0031140€	yes	yes	2,3		0.0003424	137.69
ESNPITAQQT(de)KIDAPTNIQFVNETDR	3030.4894	IPI0011353€	IPI0011353€	yes	no		3	6.4216E-10	139.04
ESIIPVTIQCND(de)ITSSSHTIMYSYWTR	3086.4841	IPI00757771	IPI00757771	yes	no		3	0.0048604	69.398
ESGIQN(de)VSTCR	1249.5721	IPI01008227	IPI01008227	yes	no		2	2.5519E-05	167.18
ESGIN(de)MTIPEENQPVVFNHIYNIK	2785.3745	IPI0040393€	IPI0040393€	yes	no		3	1.9239E-06	130.01
ERVEN(de)TSQPGEMQVTIQNIMPATVYIFK	3222.6053	IPI0012915€	IPI0012915€	yes	no		3	1.4411E-11	141.36
ERTEVIIQGTVSPN(de)ASAPDAVWEDYEFK	3150.5146	IPI00405437	IPI00405437	yes	no		3	0.0004897	77.641
ERSWSTVGN(de)CTAAIR	1706.8159	IPI00128484	IPI00128484	yes	yes		2	0.0073876	110.55
ERKP(de)JNNISDTVK	1399.7419	IPI0010884€	IPI0010884€	yes	yes		2	9.8348E-06	172.13
EREDVQAIN(de)ISVPYGPPIEDFQR	2671.3242	IPI01023131	IPI01023131	yes	no		3	6.6238E-06	130.49
EQYIHEN(de)YSR	1337.6	IPI0012740€	IPI0012740€	yes	no		2	0.012354	112.83
EQSFQGSN(de)MTIFYR	1706.7723	IPI00453571	IPI00453571	yes	no		2	0.010931	99.927
EQNYTCHVYHEGL(de)PEPITIR	2455.159	IPI01026927	IPI01026927	yes	no	2,3		5.4305E-05	171.04
EQIN(de)ISIDHR	1223.6258	IPI00127407	IPI00127407	yes	no		2	0.01621	108.7
EQGPSIVTPPKDIWN(de)VTGAK	2136.1215	IPI0092982€	IPI0092982€	yes	yes		2	0.0056374	97.384
EQESMMN(de)ITIHIVK	1671.8324	IPI0099093€	IPI0099093€	yes	no		2	0.0009212	119.88
ENYAEIIDDGFIKN(de)ITAQICIDKK	2810.416	IPI0033988€	IPI0033988€	yes	no		3	5.3177E-51	235.24
ENS(de)SYQVINWR	1394.6579	IPI0015331€	IPI0015331€	yes	yes		2	4.1334E-17	197.07
ENPGHIYNKN(de)ISQK	1640.8271	IPI0012217€	IPI0012217€	yes	no		2	3.1278E-06	164.88
ENIIDISNAN(de)R	1257.6313	IPI0094471€	IPI0094471€	no	no		2	1.4333E-11	191.29
ENIFGIQGAGGFQDREEEYAEPGVTEAEPVATEDAN(de)STDSII	4945.269	IPI00378224	IPI00378224	yes	yes	4,5		1.6143E-09	70.835
ENGTFSKYEGGVETFAHIIIVIR(de)K	2594.3493	IPI0011813€	IPI0011813€	yes	yes		3	3.5278E-05	148.06
EN(de)NSPAIHIGTISATDSDSGNAHITYSIR	3127.4806	IPI00469537	IPI00469537	yes	yes		3	1.3185E-06	89.297
EN(de)ISDPTSPIR	1227.6095	IPI0013692€	IPI0013692€	yes	no		2	0.0016547	140.14
EN(de)GTFSKYEGGVETFAHIIIVIR	2466.2543	IPI0011813€	IPI0011813€	yes	yes	3,4		1.0924E-96	265.37
EN(de)GTDVQEEEESPAEGSK	2004.8396	IPI0012334€	IPI0012334€	yes	yes		2	0.0017472	104.84
EMN(de)CSETISQIQK	1566.7018	IPI00459134	IPI00459134	yes	no		2	4.3624E-18	196.5
EMGNTVMDIIRN(de)YTANATSSREEAWDYVQAQVK	3789.7727	IPI0010809€	IPI0010809€	yes	no		4	0.045213	43.206
EMGNTVMDIIRN(de)YTANATSSR	2343.0947	IPI0010809€	IPI0010809€	yes	no		3	0.030656	66.777
EMGNT(de)VMDIIRNYTANATSSREEAWDYVQAQVK	3789.7727	IPI0010809€	IPI0010809€	yes	no		4	0.045213	43.206
EMGNT(de)VMDIIRNYTANATSSR	2343.0947	IPI0010809€	IPI0010809€	yes	no		3	0.030656	66.777
EKVEN(de)GSETGPIPEIQPIIEGEVK	2688.3858	IPI0013601€	IPI0013601€	yes	yes	2,3		2.3648E-09	170.11
EKSCVAITDAFPQN(de)MSR	1952.9084	IPI0040574€	IPI0040574€	yes	no		2	0.0096227	104.88
EKEDRPFHQAVVN(de)DTQAFWHNK	2695.2891	IPI00406901	IPI00406901	yes	no		3	0.0001497	155.94
EKDVIWFRPTIINDTGN(de)YTTCMIR	2841.3942	IPI0092988€	IPI0092988€	yes	no		3	4.2127E-06	143.57
EKDVIWFRPTIIN(de)DTGNYTCMIR	2841.3942	IPI0092988€	IPI0092988€	yes	no		3	4.2127E-06	143.57
EIYESIWQN(de)FTDSK	1758.8101	IPI0027269€	IPI0027269€	yes	yes		2	0.031467	82.102
EITGIRN(de)ISSQEGSTDVVAR	2131.0869	IPI0067739€	IPI0067739€	yes	no	2,3		2.2634E-08	190.46
EITD(de)TGKNAVNTYKKNEDDCVVR	2700.2119	IPI00266264	IPI00266264	yes	yes		3	0.030659	75.215
EIKGDGPFTVFPVPHADI(de)ISNMSQDEIAR	3085.5179	IPI0098726€	IPI0098726€	yes	no		3	4.0281E-11	138.96
EIIYSN(de)GSIIQMITMK	1987.0159	IPI0010853€	IPI0010853€	no	no	2,3		1.1584E-11€	278.27
EIIVHPN(de)YTR	1240.6564	IPI0011375€	IPI0011375€	yes	yes		2	1.168E-06	182.28
EIIVDEIISN(de)SSTIASYK	1981.0256	IPI00173181	IPI00173181	yes	no		2	0.0001434	151.95
EIISN(de)ASDAIDKIR	1543.8206	IPI0012952€	IPI0012952€	no	no		2	4.8292E-79	263.56
EIHIIQEQN(de)VSNVDFIDKEEFFIGSK	2986.4825	IPI00605187	IPI00605187	yes	no		3	2.0308E-68	247.64
EIGAIYN(de)CSNIAQDIEK	2050.0041	IPI0022141€	IPI0022141€	yes	no		2	1.2735E-13€	284.57
EIEYYVQGSFANAMYND(de)ACR	2284.9881	IPI0013260€	IPI0013260€	yes	yes		2	0.0005134	136.66
EHSIFIDIHPVTGIPMN(de)CSVK	2393.1872	IPI01008227	IPI01008227	yes	no	2,3		2.3912E-08	183.74
EGTYSIPTSN(de)FTVPDIEIPSWISTGNYR	3143.5088	IPI0011909€	IPI0011909€	yes	yes		2	4.1285E-07	92.463
EGSRTDDEVVQREEEAIQIDGIN(de)ASQIR	3156.5283	IPI0012952€	IPI0012952€	yes	yes	3,4		1.603E-18	194.75
EGPRNISTCFSSGDIF(de)AAHNISER	2664.2351	IPI0012342€	IPI0012342€	yes	no		3	1.924E-80	260.06
EGN(de)CSAQSGIAWQDCDFKDAEEAATGECTATVGK	3662.5196	IPI0011495€	IPI0011495€	yes	no		3	3.9937E-20	137.42
EGN(de)CSAQSGIAWQDCDFK	2071.8364	IPI0011495€	IPI0011495€	yes	no		2	3.6707E-85	195.96
EGKFDEVYDAIAGHPN(de)ITVYK	2436.1961	IPI0011116€	IPI0011116€	yes	no		3	1.0456E-06	142.58
EFVENSECIQCHPECIPQAMN(de)ITCTGR	3279.3876	IPI0012119€	IPI0012119€	yes	no	3,4		2.4191E-09	129.2
EFQHN(de)STMYK	1446.6238	IPI0078844€	IPI0078844€	yes	no		2	0.0032921	131.82
EFEQIQVFMSSVIDMFPIGPN(de)K	2555.244	IPI0099093€	IPI0099093€	yes	yes		3	0.013966	64.2
EEQFN(de)STFR	1156.5149	IPI0047524€	IPI0047524€	yes	no		2	0.0078667	137.95
EEN(de)ATIATYPEFGVIDIK	2008.9993	IPI00124221	IPI00124221	yes	no		2	3.4345E-19	206.62

EEIGTYPPYPTGEPVFGGIPQN(de)ASIVTHIAHTFQDIK	4190.0637	IPI00453571	IPI00453571	yes	no		4	0.017711	41.935
EEEAIQIDGIN(de)ASQIR	1784.8905	IPI0012952E	IPI0012952E	yes	yes		2	3.5017E-13	197.75
EDTVTITCEGTHNPGN(de)SSTQWFHNGR	2944.2794	IPI0012948E	IPI0012948E	yes	no		3	7.3394E-10	139.11
EDSSRAVN(de)VSAIPANIQK	1897.9858	IPI0035430C	IPI0035430C	yes	no		2	0.0050296	98.508
EDSCQINY(de)SEGPCIGMQR	2271.9195	IPI0012735Z	IPI0012735Z	yes	yes		2	2.8743E-77	254.82
EDRPFHQAVVNDT(de)QAFWHNK	2438.1516	IPI0040690I	IPI0040690I	yes	no		3	1.1889E-12	197.14
EDIIA(de)IRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no	2,3		9.8409E-06	172
ED(de)IIAIRQNFSNITVSTEDQVK	2519.2867	IPI00129677	IPI00129677	yes	no	2,3		9.8409E-06	172
ECIGN(de)CSEPDDPTK	1620.6396	IPI0012835E	IPI0012835E	yes	no		2	3.4599E-07	171.81
ECHTIQN(de)YTIWR	1619.7515	IPI0012522C	IPI0012522C	yes	no	2,3		7.7825E-67	251.24
EAYKN(de)ISIIYSQMOK	1814.9237	IPI0022170E	IPI0022170E	yes	no	2,3		3.8266E-10	188.59
EATIVGEN(de)ETYPR	1477.7049	IPI0013114Z	IPI0013114Z	yes	no		2	0.009308	100.22
EASNHSSGAGIVQIN(de)KSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	0.0055786	75.868
EASNHSSGAGIVQIN(de)K	1610.8012	IPI00108844	IPI00108844	yes	no	2,3		8.1987E-38	231.71
EASN(de)HSSGAGIVQINKSNDKETVVGR	2696.3478	IPI00108844	IPI00108844	yes	no		3	0.0055786	75.868
EASN(de)HSSGAGIVQINK	1610.8012	IPI00108844	IPI00108844	yes	no	2,3		8.1987E-38	231.71
EASHYSIHDIVISYN(de)TSDSTVFPGAVAK	3007.4563	IPI00222967	IPI00222967	yes	no	2,3,4		3.5426E-20	202.73
EARPITPAAIN(de)GSIQR	1692.9271	IPI0051543Z	IPI0051543Z	yes	no		2	0.0085052	107.69
EAQYN(de)STFR	1114.5043	IPI0080798Z	IPI0080798Z	yes	no		2	0.0056377	145.25
EAN(de)ITEDQIIFFPK	1663.8457	IPI0012212Z	IPI0012212Z	yes	no		3	0.0033294	113.99
EAFN(de)ETNQAIQTISR	1720.838	IPI00112614	IPI00112614	yes	yes		2	5.1753E-15E	295.37
EAFIPQGGSVQVN(de)CSSSCK	2053.9197	IPI0012297Z	IPI0012297Z	yes	no		2	0.0005899	131.98
EACIQHYVYN(de)ASYIVWK	2143.0197	IPI0012015E	IPI0012015E	yes	yes		2	0.0002066	146.3
E(de)SVYRNYISIFIADINQER	2216.0862	IPI0033131E	IPI0033131E	yes	no		3	0.0008323	162.81
DYYPIN(de)ESIASIPR	1749.8938	IPI00121627	IPI00121627	yes	yes	2,3		9.2645E-07	167.98
DYYIN(de)KTENEK	1415.6569	IPI0039684C	IPI0039684C	yes	no		2	4.2313E-17	199.82
DYRPSAGN(de)NSIQDQTVVFK	2173.044	IPI0032246Z	IPI0032246Z	yes	no	2,3		3.3336E-05	179.1
DYCMYNNN(de)WTR	1698.6555	IPI0012177E	IPI0012177E	yes	yes		2	2.8152E-09	179.93
DWIWNQMHIIDEKN(de)ESIPHYVGK	2867.3337	IPI0013818C	IPI0013818C	yes	yes		3	0.0056894	86.727
DWCN(de)WTIISR	1349.6187	IPI0012493Z	IPI0012493Z	yes	no		2	1.2226E-09	189.13
DVIWFRPTIINDTGNYT(de)CMIR	2584.2566	IPI0092988E	IPI0092988E	yes	no		3	0.0002221	156.13
DVGSSTTN(de)NSQACAQFIEQYFHNSDITEFMR	3566.5467	IPI0013066I	IPI0013066I	yes	yes	3,4		1.6623E-15	164.31
DVFIP(de)KPSWGNHTPIFR	2010.0476	IPI0011731Z	IPI0011731Z	yes	yes	2,3		0.0092565	130.21
DTYVN(de)ASQSIYGSSPR	1743.8064	IPI00122977	IPI00122977	yes	no		2	1.1346E-17E	306.53
DTVQHWN(de)WTSDIPIQCATHSVSIR	2850.3508	IPI0011929E	IPI0011929E	yes	no		3	2.0563E-05	113.73
DTTGSHTFQGMFGCEITNN(de)R	2271.9637	IPI00137987	IPI00137987	yes	yes		3	0.000392	118.48
DTISIN(de)ATNIK	1188.635	IPI0012119C	IPI0012119C	yes	no		2	7.127E-34	221.55
DTEENIHVIN(de)QTISEVIFPMDIK	2684.3367	IPI0035646Z	IPI0035646Z	yes	no		3	0.028418	63.69
DTCAQECSHFNI(de)TKVESR	2180.9579	IPI00132474	IPI00132474	yes	no		3	0.0023707	130.4
DTCAQECSHFNI(de)TK	1709.7138	IPI00132474	IPI00132474	yes	no		2	2.6329E-39	232.17
DTAVEGEEIEVN(de)CTAMASKPATTIR	2692.2684	IPI0085672Z	IPI0085672Z	yes	no		3	0.0006886	95.624
DSYDPGN(de)ITWYRNGK	1784.8118	IPI0012137E	IPI0012137E	yes	no		2	7.1503E-11	192.39
DSYDPGN(de)ITWYR	1485.6525	IPI0012137E	IPI0012137E	yes	no		2	0.0060213	107.17
DSKIN(de)NTNVR	1159.5945	IPI0038080I	IPI0038080I	yes	no		2	0.021667	113.69
DSGIWINGFDYTGMSHVTPHIPEIN(de)DTIR	3284.5561	IPI0040722Z	IPI0040722Z	yes	yes		3	1.1449E-14	144.56
DQQAEEANKN(de)ASIIK	1712.9057	IPI01016174	IPI01016174	yes	no		3	0.026137	83.499
DQGNV(de)TDMASMK	1295.5486	IPI0047108I	IPI0047108I	yes	yes		2	1.6243E-81	257.76
DQDCDKF(de)NQCCTEFKECHTIQNYTIWR	3753.5705	IPI0012522C	IPI0012522C	yes	no		4	3.3565E-05	82.302
DQCIVDDITYNVN(de)DTFHKR	2352.0805	IPI0011353E	IPI0011353E	yes	no	2,3		7.5559E-09	192.6
DQCIVDDITYNVN(de)DTFHK	2195.9793	IPI0011353E	IPI0011353E	yes	no	2,3		4.3996E-94	269.59
DNVN(de)CSGVYEHEPIEIGK	2058.9317	IPI00947577	IPI00947577	yes	yes		2	2.3018E-05	176.28
DNSCVDPPHVPN(de)ATIVTR	1990.9531	IPI0013001C	IPI0013001C	yes	no	2,3		4.6604E-77	256.67
DNATDS(de)VPIR	1086.5306	IPI0011906Z	IPI0011906Z	yes	yes		2	6.5544E-07	157.68
DN(de)YSVIIQENKPVGFSVIK	2149.1419	IPI00623114	IPI00623114	yes	no		2	0.021004	85.362
DN(de)TTCYEFKK	1304.5707	IPI0011906Z	IPI0011906Z	yes	yes		2	0.0029896	155
DN(de)SSGTFIVIR	1320.7038	IPI0011996I	IPI0011996I	yes	no		2	0.0019282	126.83
DN(de)SCVDPPHVPNATIVTR	1990.9531	IPI0013001C	IPI0013001C	yes	no	2,3		4.6604E-77	256.67
DN(de)HTSCAECIK	1333.5391	IPI0032060E	IPI0032060E	yes	no		2	0.0009939	150.46
DN(de)DSIITRK	1060.5513	IPI0013116E	IPI0013116E	yes	yes		2	0.029389	145.25
DN(de)DSIITR	932.45632	IPI0013116E	IPI0013116E	yes	yes		2	0.044658	91.658
DN(de)ATQEEIIHYIEK	1701.821	IPI0032119C	IPI0032119C	yes	no	2,3		4.5808E-07	171.26
DMSDGFISN(de)ITIQR	1595.7614	IPI0027238I	IPI0027238I	yes	no		2	3.1742E-11E	283.82
DKVTFIN(de)TTR	1193.6404	IPI00120674	IPI00120674	yes	no		2	0.0098327	131.43
DKNGTAEPPIN(de)ASAGDQEEK	2226.0513	IPI0012334Z	IPI0012334Z	yes	yes	2,3		1.1583E-78	263.55
DKN(de)GTRAEPINASAGDQEEK	2226.0513	IPI0012334Z	IPI0012334Z	yes	yes	2,3		1.1583E-78	263.55
DKISPIHIA(de)INFSIDPK	1907.0516	IPI0011597E	IPI0011597E	yes	yes	2,3		5.3451E-05	172.82
DIWN(de)VTGAK	1002.5134	IPI00652107	IPI00652107	no	no	1,2		0.035656	113.62
DIWN(de)VTGAK	1002.5134	IPI00652107	IPI00652107	no	no	1,2		0.035656	113.62
DIVV(de)EIYSQWMKNPNNTIHPNIR	2894.4497	IPI0031950E	IPI0031950E	yes	no		3	0.0007815	102.98
DIVQNVFMSN(de)MSMDIQSHPSSCP	2751.2125	IPI0012119C	IPI0012119C	yes	no		3	3.6769E-05	110.75
DIVGN(de)ITEIESEDIQIEAIIMR	2500.2731	IPI0012239E	IPI0012239E	yes	no		3	2.03E-29	219.87
DITNIIN(de)NTFIR	1432.7674	IPI0065003E	IPI0065003E	yes	no		2	3.9383E-19	198.74
DISVFAPN(de)MTEIHKDVTQYR	2339.1831	IPI0085510Z	IPI0085510Z	yes	no		3	0.020153	83.418
DISGN(de)ETHFTGSEVGFIPISCR	2550.2173	IPI0012365Z	IPI0012365Z	yes	no		3	7.6848E-10	190.67
DIRPN(de)HTIYINMNDKIK	2198.1266	IPI0013257E	IPI0013257E	yes	no		3	0.018418	76.82
DIQDIHKDTEN(de)R	1482.7063	IPI00129304	IPI00129304	yes	yes		2	0.0019377	149.69
DINSQIEIQNVN(de)DTHITIIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes		3	4.8492E-15	168.25
DINSQIEIQN(de)VTNDTHITIIIGIKPDTTYDIK	3511.8046	IPI00110264	IPI00110264	yes	yes		3	4.8492E-15	168.25
DIN(de)HTAQGIIEK	1337.6939	IPI0012095Z	IPI0012095Z	yes	no		2	0.0020489	141.37
DIIHSTGHN(de)ISR	1461.7688	IPI00223987	IPI00223987	yes	yes		2	1.0968E-18	201.48
DIHVVFHFGQTIIDN(de)R	1899.9704	IPI0040660Z	IPI0040660Z	yes	yes		2	0.0038919	110.22
DIGTASHN(de)FSGAIPR	1541.7587	IPI0022982C	IPI0022982C	yes	yes		2	1.2151E-05	157.38
DIGPAIAN(de)SSHDVK	1422.7103	IPI0010881I	IPI0010881I	yes	yes		2	3.9849E-21	205.3
DIFTNQSDFADTTKDTPIITIVH(de)K	2820.4182	IPI0011610E	IPI0011610E	yes	yes		3	2.3453E-09	166.27
DIEHHITNVNVSFYDDIVN(de)GTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	4.0427E-30	220.63
DIEHHITNVN(de)VSFYDDIVNGTVIK	2741.3661	IPI0046760C	IPI0046760C	yes	yes		3	4.0427E-30	220.63



DIDTDFTSN(de)ASQPETK	1767.7799	IPI00130573	IPI00130573	yes	yes		2	7.9916E-09	188.44
DIAVGDDYTN(de)R	1237.5575	IPI00468674	IPI00468674	yes	no		2	0.0056909	113.61
DHVNVSMEIATDFPFN(de)TTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	3.9459E-11	183.07
DHVN(de)VSMIEATDFPFNTTEWEGYIPK	3039.396	IPI00136942	IPI00136942	yes	yes		3	3.9459E-11	183.07
DHIIN(de)KTHSICPR	1589.8096	IPI00118994	IPI00118994	yes	yes		2	0.0022794	144.27
DHGDIAFVDVFN(de)DSSFQIVKNPR	2569.2561	IPI00117914	IPI00117914	yes	yes		3	5.9361E-112	228.39
DGTSQPAICPQN(de)VTMNMEGIK	2290.0392	IPI00320204	IPI00320204	yes	yes		2	7.2736E-30	223.54
DGTDDPSYNGAIIVSGNEKN(de)HSFSFACNTK	3244.4367	IPI00170145	IPI00170145	yes	no		3	2.1316E-06	107.17
DGSQDFNE(de)TWENYEK	1860.7439	IPI00128206	IPI00128206	yes	yes		2	1.2866E-08	182.57
DGSDSAAMVYN(de)SSQEWGIR	2071.8905	IPI00119522	IPI00119522	yes	yes		2	1.0186E-204	315.94
DGIAIN(de)ITIR	1084.6241	IPI00119065	IPI00119065	yes	yes		2	0.0037173	136.48
DGHFKEDPYWENMIN(de)HSVHR	2510.1186	IPI00410796	IPI00410796	yes	yes		3	0.0002025	140.22
DGAFHHIHSTPFGN(de)YSFISVDATQRPQPK	3182.5322	IPI00226714	IPI00226714	yes	no		3	8.0232E-09	133.41
DFIN(de)YTIEER	1298.6143	IPI00134191	IPI00134191	yes	no		2	0.0018552	152.7
DEIGN(de)VSTSHIIIDDSVEMEIRPR	2837.4229	IPI00309035	IPI00309035	yes	yes		3	0.0024912	79.467
DDYRPTWTIN(de)QTEPVAGNYYPVNT	2969.3944	IPI00381303	IPI00381303	yes	yes	3,4		5.7996E-55	240.44
DDIHPTIPAGQYFIN(de)ITYNYPVHSFDGR	3249.552	IPI00387318	IPI00387318	yes	no	3,4		1.1557E-11	175.42
DCVSCQN(de)VSR	1223.5023	IPI0012119C	IPI0012119C	yes	no		2	6.8408E-06	177.44
DCDFIEDGEERN(de)CTGK	1943.7626	IPI0012728C	IPI0012728C	yes	yes		2	4.9776E-28	222.45
DAMVGN(de)YTCEVTEISR	1843.808	IPI0012483C	IPI0012483C	yes	no		2	5.5194E-49	239.55
DAHFN(de)STITEFGETINNFVER	2440.1295	IPI00346062	IPI00346062	yes	yes		3	0.0070384	83.723
DAGN(de)YTVIITNPISMEK	1864.9241	IPI00124326	IPI00124326	yes	no		2	0.0019444	134.93
DAAQCSGGSVAHIAEIGIPTN(de)JTHIIIFR	3060.5815	IPI00331407	IPI00331407	yes	no		3	1.1527E-12	146.75
CVYEAICSN(de)VTSECPPPVITR	2451.1233	IPI00405742	IPI00405742	yes	no		3	1.5613E-09	193.19
CVVHYEN(de)STVPEKK	1688.8192	IPI00409148	IPI00409148	yes	yes	2,3,4		7.3812E-08	181.71
CVVHYEN(de)STVPEK	1560.7242	IPI00409148	IPI00409148	yes	yes		2	0.0023324	119.88
CVAN(de)YTGNGR	1110.4876	IPI00111793	IPI00111793	yes	yes		2	0.0044883	134.57
CTPPPYVENAVMISEN(de)R	1975.9132	IPI00138061	IPI00138061	yes	no		2	4.1806E-05	155.1
CTAQVCAGYCSNN(de)STCTVNQGNQPQCR	3134.2481	IPI00119063	IPI00119063	yes	yes		3	0.0011242	73.11
CTAQVCAGYCSN(de)NSTCTVNQGNQPQCR	3134.2481	IPI00119063	IPI00119063	yes	yes		3	0.0011242	73.11
CSIIHSN(de)ISVK	1256.6547	IPI00133222	IPI00133222	yes	no		2	7.1499E-12	190.53
CQSPYQMN(de)GSDTVTCVNSR	2202.9092	IPI0013001C	IPI0013001C	yes	no	2,3		3.2954E-05	142.94
CQAYKN(de)NSESFIHIYMYEVAR	2622.1995	IPI00130654	IPI00130654	yes	no		3	8.4578E-05	135.18
CQAIDFFPQN(de)ITMR	1739.8123	IPI0033144C	IPI0033144C	yes	no		2	0.000577	127.71
CPMAGISHTTWHSN(de)R	1753.7777	IPI00130764	IPI00130764	yes	no	2,3		5.1494E-11	190.24
CPIITPFNDTNVVHTVNTAIAAFNTQNN(de)GTYFK	3681.7886	IPI00128249	IPI00128249	yes	yes	3,4		2.5203E-18	161.49
CPIITPFN(de)DTNVVHTVNTAIAAFNTQNNGTYFK	3681.7886	IPI00128249	IPI00128249	yes	yes	3,4		2.5203E-18	161.49
CNSVITYN(de)ITPVVQK	1734.8975	IPI00222967	IPI00222967	yes	no		2	7.6912E-29	219.52
CN(de)ITIKDPTPADPIWYEA	2231.0933	IPI00114842	IPI00114842	yes	no		2	0.001305	150.91
CN(de)ASSQFICSSGR	1472.6136	IPI00119063	IPI00119063	yes	yes		2	0.0015131	127.32
CIVPHTVN(de)ISSAWRNHSIPIETK	2658.37	IPI00129041	IPI00129041	yes	no		3	0.031276	57.41
CIVPHTVN(de)ISSAWR	1638.83	IPI00129041	IPI00129041	yes	no		2	5.6014E-06	166.03
CISPNVTSCACTIN(de)FTIK	2084.9693	IPI00387318	IPI00387318	yes	yes		2	1.8804E-36	225.54
CISPN(de)VTSCACTINFTIK	2084.9693	IPI00387318	IPI00387318	yes	yes		2	1.8804E-36	225.54
CISKN(de)YTTDIITK	1555.7916	IPI0012464C	IPI0012464C	yes	yes		2	0.032145	91.307
CIQMSSFAN(de)R	1212.538	IPI00320065	IPI00320065	yes	no		2	7.2309E-68	248.88
CIQHFYGPNEHCFCN(de)R	2114.8952	IPI0013042C	IPI0013042C	yes	no		3	9.9973E-05	171.73
CIPHFAMIGNDTVMCTEQGN(de)WTRIPPECIEVK	3705.687	IPI00322463	IPI00322463	yes	no		4	4.268E-09	120.63
CIPHFAMIGNDTVMCTEQGN(de)WTR	2737.1869	IPI00322463	IPI00322463	yes	no		3	1.8474E-06	149.44
CIPHFAMIGN(de)DTVMCTEQGNWTRIPPECIEVK	3705.687	IPI00322463	IPI00322463	yes	no		4	4.268E-09	120.63
CIPHFAMIGN(de)DTVMCTEQGNWTR	2737.1869	IPI00322463	IPI00322463	yes	no		3	1.8474E-06	149.44
CIN(de)GTINYPTCV	1410.6272	IPI0013001C	IPI0013001C	yes	no		2	0.001397	160.67
CHEGN(de)GTFECGACR	1653.6082	IPI00132474	IPI00132474	yes	yes	2,3		3.0839E-06	169.4
CGNCN(de)ITSIEDEDFCK	1960.7601	IPI00137599	IPI00137599	yes	yes		2	1.002E-112	280.7
CFNAMEVDAIN(de)SSHPVSTPVENPAQIR	2982.3964	IPI00318595	IPI00318595	yes	no		3	5.0249E-45	233.68
CF(de)ANKVNISFPSAQSIASDTHIK	2631.3115	IPI00624663	IPI00624663	yes	yes	2,3,4		1.2157E-39	229.75
CEVICNQ(de)SNKPITITVEQSR	2375.1573	IPI00626537	IPI00626537	yes	yes		3	0.0016497	106.57
CEQEASEDIKPAITGN(de)K	1888.8837	IPI00134808	IPI00134808	yes	no		2	1.4063E-36	231.06
CDPISETQQWIFEHIN(de)MTVIEKNSHYAIS	3489.6333	IPI00761633	IPI00761633	yes	yes		3	0.03058	47.38
CDGDFDCEDRTDEAN(de)CSVK	2291.8365	IPI0051536C	IPI0051536C	yes	no		2	7.2265E-08	191.35
CCGWVSHYN(de)WTENEIMGFTK	2647.093	IPI00108098	IPI00108098	yes	no		3	0.029768	53.768
CAMDIGVNYIGTVN(de)VTHTGIQCQIWR	3005.431	IPI00114206	IPI00114206	yes	yes		3	0.0003138	80.236
CAISHAITIEFHQDGNPENVGIYN(de)ISR	3111.4832	IPI00222429	IPI00222429	yes	yes	3,4		9.3476E-20	198.6
C(de)IVPHTVNISAWRNHSIPIETK	2658.37	IPI00129041	IPI00129041	yes	no		3	0.031276	57.41
AYTIFVPTNHSIETQGN(de)NSVIGIDTVR	2945.4883	IPI00987265	IPI00987265	yes	no		3	0.0001824	87.802
AYTIFVPTN(de)HSIETQGNNSVIGIDTVR	2945.4883	IPI00987265	IPI00987265	yes	no		3	0.0001824	87.802
AY(de)AISGPTVQDGIPPFNWNRFNETIHR	3099.5315	IPI00471081	IPI00471081	yes	yes	3,4		0.0001812	100.76
AWN(de)YTVDTPHGMFVSGTPEQSVWITDVGSGPYGHTVK	4166.9473	IPI00228567	IPI00228567	yes	yes		4	0.0001382	64.885
AWGISVINPN(de)KTK	1426.7932	IPI00989096	IPI00989096	yes	no		2	0.0005154	158.11
AWEKEIHHI(de)QEQNVSNNFIDKEEFFIGSK	3500.7365	IPI00605187	IPI00605187	yes	no		3	8.6266E-12	150.36
AVYEAIRN(de)CSIEDDSVR	1995.932	IPI00856861	IPI00856861	yes	no		2	0.0029646	120.63
AVVGSYTTTN(de)VSIIAPR	1747.9468	IPI00330481	IPI00330481	yes	yes		2	8.7727E-05	151.48
AVNAHVEIGYSTIVGVFHTEYGAIN(de)R	2816.4246	IPI00132444	IPI00132444	yes	yes	3,4		2.319E-09	171.29
AVN(de)QTGAIYQCDYSTSR	1932.8636	IPI00120674	IPI00120674	yes	no		2	6.5469E-10	193.19
AVN(de)QSMIR	917.47529	IPI0047109C	IPI0047109C	yes	yes		2	0.029604	118.5
AVKIN(de)ETIGNQDK	1428.7573	IPI00309999	IPI00309999	yes	yes		2	0.0036271	121.18
AVISMIN(de)ETMNEAPEETK	2005.9336	IPI00470184	IPI00470184	yes	no	2,3		1.3368E-179	311.92
AVGAVDWDSHPYGYN(de)ITIQAK	2304.1175	IPI00623114	IPI00623114	yes	no		2	0.030995	66.874
AVCGIN(de)TSDRCDFVR	1768.7985	IPI00127134	IPI00127134	yes	no		2	0.046389	84.468
AVCGIN(de)TSDR	1091.503	IPI00127134	IPI00127134	yes	no		2	0.02362	101.38
ATVN(de)DSGEYR	1110.4942	IPI00129485	IPI00129485	yes	no		2	0.0089509	123.51
ATPNEGFFNQN(de)ITTFYYDR	2297.0389	IPI00315535	IPI00315535	yes	yes	2,3		1.3579E-62	250.04
ATIITFICDRDAGVGFPEYQEEDN(de)STYNFR	3527.594	IPI00308971	IPI00308971	yes	yes		3	3.2051E-14	149.73
ATHN(de)DSGSYFCR	1413.5732	IPI0016287C	IPI0016287C	yes	yes		2	0.0045144	112.51
ATDADINDIIVYTIQEVTPN(de)ASK	2490.249	IPI00314132	IPI00314132	yes	no		3	1.666E-05	119.62
ASVVN(de)VTQHCTMESWESMNEVAR	2664.1731	IPI0012124C	IPI0012124C	yes	yes	2,3		2.5673E-06	124.2



ASSFRPN(de)GTK	1150.5731	IPI00113797	IPI00113797	yes	yes		2	0.033848	96.82
ASSIMVN(de)ITEIFPKPK	1773.9699	IPI00406901	IPI00406901	yes	no		2	2.3102E-08	186.42
ASQQISN(de)ETSSFGFNIIR	1997.9807	IPI0015325E	IPI0015325E	yes	no	2,3		3.7023E-62	248.46
ASIITGKYPHNHHVVN(de)NTIEGNCSK	2876.3988	IPI0022142E	IPI0022142E	yes	yes		3	3.7142E-09	131.56
ASIITGKYPHNHHVV(de)NNTIEGNCSK	2876.3988	IPI0022142E	IPI0022142E	yes	yes		3	3.7142E-09	131.56
ASGN(de)FSQVDWFIIHK	1747.8682	IPI0046912E	IPI0046912E	yes	no	2,3		0.0011385	129.01
AQTN(de)YTCVAEIIYR	1700.8192	IPI0032305E	IPI0032305E	yes	no		2	1.6232E-06	165.49
AQAGNKSQDSGIAEMEEIPVPHNIKINN(de)ITCDSFK	3854.8567	IPI00969894	IPI00969894	yes	yes		4	0.026275	49.967
AQAGN(de)KSQDSGIAEMEEIPVPHNIKINNITCDSFK	3854.8567	IPI00969894	IPI00969894	yes	yes		4	0.026275	49.967
AQAAIDKAN(de)ASR	1214.6367	IPI0011906E	IPI0011906E	yes	yes		2	1.0608E-08	175.21
APYTIEN(de)SSHR	1273.6051	IPI0047129E	IPI0047129E	yes	no		2	0.0075123	109.72
APQHVVNHIIPPYTN(de)VSIK	2013.0796	IPI0012304C	IPI0012304C	yes	no	2,3		0.0003396	159.04
APIPTAIDTN(de)SSKTPSIFPCASGAFSSFR	3026.4808	IPI0011980E	IPI0011980E	yes	no		4	0.032709	52.366
APIPTAIDTN(de)SSK	1313.6827	IPI0011980E	IPI0011980E	yes	no		2	0.0027209	118.24
ANQVIPHN(de)TTFQTEPTK	2038.0484	IPI00466371	IPI01026704	no	no	2,3		2.2327E-05	176.49
ANISKYSIVMEADSGTFIPTGIQF(de)TGSDK	3076.5063	IPI0012605C	IPI0012605C	yes	no		3	0.01779	59.046
ANIQKGENPSQYGITAF(de)NHPINITK	2754.4089	IPI00112614	IPI00112614	yes	yes		3	0.047571	48.597
ANIQFGENGT(de)TISAVTNK	1863.9327	IPI00127447	IPI00127447	yes	yes	2,3		3.8652E-95	273.82
ANEQVIQNIN(de)HTYK	1670.8376	IPI00876541	IPI00876541	yes	no		2	8.5401E-07	169.3
AN(de)YTIKGNENGNFK	1681.8424	IPI0013820E	IPI0013820E	yes	no		2	0.0004752	145.1
AN(de)YTIK	821.4647	IPI0013820E	IPI0013820E	yes	no		2	0.0023591	161.68
AN(de)TSIEIIIIEGVR	1413.7827	IPI0098851E	IPI0098851E	yes	no		2	0.0014353	129.54
AN(de)KSSDIVSANR	1260.6422	IPI0013664E	IPI0013664E	yes	yes		2	0.012091	104.59
AN(de)ISSQVIK	958.54475	IPI00322867	IPI00322867	yes	no		2	0.015968	123.86
AN(de)GTTVHVGIHPSK	1416.7474	IPI0013246C	IPI0013246C	yes	no		2	0.0016696	121.45
AN(de)ESRIIEADQIYR	1692.8067	IPI00224237	IPI00224237	yes	no		2	0.0024492	128.22
AN(de)DTREEAGIPAAGEDETSWTER	2504.1052	IPI00653847	IPI00653847	yes	no		3	0.0004474	108.25
AN(de)DSDQGANAIEIDYTFHQAPEVVR	2802.2957	IPI00719927	IPI00719927	yes	no		3	3.1657E-12	186.11
AN(de)DSDQGANAIEIDYTFHQAPEVVR	2646.1946	IPI00719927	IPI00719927	yes	no		3	2.487E-07	156.51
AMSSN(de)ETAAYKIMR	1571.7436	IPI0031646E	IPI0031646E	yes	yes		2	0.013204	92.063
AMN(de)ISASSMTITWK	1539.7425	IPI0046942E	IPI0046942E	yes	no		2	4.2469E-39	228.03
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYK	3694.9116	IPI0038728E	IPI0038728E	yes	yes	3,4,5,6		1.2689E-14	170.59
AMIINQHVPMESSHIIQFVN(de)WSSIIPERYK	3566.8167	IPI0038728E	IPI0038728E	yes	yes	3,4,5		1.6081E-14	143.48
AMIINQHVPMESSHIIQFVN(de)WSSIIPER	3275.6584	IPI0038728E	IPI0038728E	yes	yes	3,4		5.4695E-12	181.82
AMGVNVIAANTHN(de)TSMHMTGSGIYSPEAVR	3115.4638	IPI0023041E	IPI0023041E	yes	yes	3,4		3.9842E-15	135.62
AMFN(de)ITIIYPNNIIAISNMIPK	2490.3379	IPI0031950E	IPI0031950E	yes	yes	2,3		4.1228E-07	141.83
AKEWGYAS(de)HNGPDHWHEIYPIAK	2705.2775	IPI0022189C	IPI0022189C	yes	yes		3	0.0017339	94.057
AIWIIN(de)GSK	1000.5706	IPI0012466E	IPI0012466E	yes	yes		2	0.019243	118.71
AIVN(de)FTR	819.46029	IPI0051536C	IPI0051536C	yes	no		2	0.03315	106.36
AISPN(de)STISSAPK	1271.6721	IPI00460291	IPI00460291	yes	no		2	0.0010868	146.59
AISCISSWKTIEQERN(de)ASFVYTK	2846.3909	IPI0012322E	IPI0012322E	yes	yes		3	0.0058892	87.352
AINASAN(de)ITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no		2	0.0030716	106.57
AIN(de)VTISSMGRNGIK	1559.8454	IPI00131091	IPI00131091	yes	no		2	0.0077158	106.42
AIN(de)VTISSMGR	1147.6019	IPI00131091	IPI00131091	yes	no		2	0.0014458	142.97
AIN(de)SSTEDGIK	1289.6575	IPI0012916E	IPI0012916E	yes	yes		2	0.009621	100.04
AIN(de)GSAIYTGSSIDFVR	1769.8948	IPI00877197	IPI00877197	yes	no		2	1.5744E-17E	305.43
AIN(de)DSIHYINR	1314.668	IPI0080834E	IPI0080834E	yes	no		2	0.005026	118.48
AIN(de)ASANITSDGVEVIGR	1785.9221	IPI0033063E	IPI0033063E	yes	no		2	0.0030716	106.57
AIMKEVMNIIQPIN(de)VTK	1941.0791	IPI0012605C	IPI0012605C	yes	no	2,3		2.3891E-07	170.89
AIMDICDQIEKN(de)QTK	1805.8652	IPI0065863E	IPI0065863E	yes	yes		2	1.165E-256	237.46
AIKSHGIWN(de)NTVFIFSTDNGGQTR	2662.3252	IPI0065235E	IPI0065235E	yes	no		3	0.024008	70.538
AIKGETVN(de)TSIPFSFEGIIIPK	2394.2835	IPI00119324	IPI00119324	yes	no		3	0.016034	77.631
AIIQGIPEQN(de)YTVQIIAYYKDK	2680.4476	IPI0033063E	IPI0033063E	yes	no		3	0.023121	70.334
AIIQGIPEQN(de)YTVQIIAYYK	2437.3257	IPI0033063E	IPI0033063E	yes	no		3	0.0001059	170.11
AIGYEN(de)ATQAIGR	1362.6892	IPI0011980E	IPI0011980E	yes	no		2	2.5625E-24	208.82
AIGITEMFEPKAN(de)FTK	1882.9499	IPI0011506E	IPI0011506E	yes	yes		2	0.002819	123.4
AIEIQFGMN(de)ASSIFFIQGVR	2314.178	IPI0046921E	IPI0046921E	yes	yes		3	5.8925E-05	139.88
AIDREAETVRNGIYN(de)ITVIAIDADGR	2844.473	IPI0013820E	IPI0013820E	yes	no		3	0.020081	68.634
AIDIDPSKTN(de)VSGGAIAGHPIGGSGSR	2646.3725	IPI0022643C	IPI0022643C	yes	yes		3	1.1834E-10	145.2
AIAGIVYN(de)SSGTEPCYDIYR	2248.047	IPI0033155C	IPI0033155C	yes	yes	2,3		3.9606E-78	260.31
AIAAAGYDVEKN(de)NSR	1577.7798	IPI00223714	IPI00223714	no	no		2	4.5498E-05	158.93
AHFSSIN(de)ITIR	1257.683	IPI00466371	IPI01026704	no	no		2	2.5598E-13	193.28
AGYFN(de)FTSATITYIAQEDGPVIGSTSAPGQGIIAQR	3856.9272	IPI0046718C	IPI0046718C	yes	yes		4	2.1724E-27	150.82
AGVVVFN(de)CSIR	1220.6336	IPI0031477E	IPI0031477E	yes	yes		2	0.020574	95.477
AGPN(de)GTIFVVDAYK	1450.7456	IPI0022199E	IPI0022199E	yes	yes		2	5.8164E-15	194.55
AGMASPIYN(de)VTWSAGWK	1837.8821	IPI00666034	IPI00666034	yes	no		2	0.026892	82.007
AGIN(de)ASYSEK	1038.4982	IPI00308971	IPI00308971	yes	yes		2	0.0010053	161.67
AGEQINNHVKN(de)KTQGK	1764.9231	IPI0011610E	IPI0011610E	yes	no	2,3		0.0079229	118.21
AGEQINNHVKN(de)K	1350.7004	IPI0011610E	IPI0011610E	yes	no		2	0.025003	96.604
AFYN(de)GTWYR	1176.5352	IPI0085831E	IPI0085831E	yes	no		2	0.0010322	168.83
AFVEN(de)ITVIENSIVFK	1821.9877	IPI0074238E	IPI0074238E	yes	no	2,3		0	370.3
AFQIN(de)TFNIKVQPFNVTK	2108.1419	IPI00222967	IPI00222967	yes	no		3	0.032864	82.349
AFPEVCN(de)ETMMAIWEECKPCIK	2742.1984	IPI0032042C	IPI0032042C	yes	no		3	0.0030842	88.283
AFNISPN(de)DTSSGSCGINIVTIK	2294.1213	IPI0046921E	IPI0046921E	yes	yes	2,3		7.3206E-11E	277.25
AFN(de)ITWISTDFK	1441.7242	IPI0011806E	IPI0011806E	yes	no		2	0.000688	158.58
AFN(de)ECCTIANK	1326.5697	IPI0033083E	IPI0033083E	yes	yes		2	2.2026E-05	162.49
AFMN(de)SSFTIDPK	1356.6384	IPI0012136E	IPI0012136E	yes	no		2	3.5093E-19	199.8
AFITNF(de)SMIIDGVTPGVVK	2171.1337	IPI00312711	IPI00312711	yes	no	2,3		7.0773E-28	220.62
AFIN(de)GTGVETVVSADIPNAHGIAVDWVSR	2994.5199	IPI0011906E	IPI0011906E	yes	yes	3,4		1.576E-14	178.11
AFFDETKN(de)NTR	1341.6313	IPI00120674	IPI00120674	yes	no		2	0.0027234	141.08
AEQITIHAIGIGEANKT(de)QIR	2162.1808	IPI0099093E	IPI0099093E	yes	no		3	0.028883	77.031
AEPINASAGDQ(de)EEK	1554.7162	IPI0012334E	IPI0012334E	yes	yes	2,3		0.008687	101.2
AEISN(de)HTRPVIIIPGICGNRIEAK	2643.4279	IPI0013350C	IPI0013350C	yes	yes	3,4		1.0586E-05	122.64
AEISN(de)HTRPVIIIPGICGNR	2202.1692	IPI0013350C	IPI0013350C	yes	yes	2,3		0.0001981	168.41
AEDYGPVEVISHWHPNITINI(de)VDDHTPWVK	3480.7103	IPI00121627	IPI00121627	yes	yes		4	3.3306E-06	89.079
AEDYGPVEVISHWHPNI(de)TINIVDDHTPWVK	3480.7103	IPI00121627	IPI00121627	yes	yes		4	3.3306E-06	89.079

ADSIYSQVVGISASQAN(de)ISK	2037.0378	IPI00115116	IPI00115116	yes	yes	3	9.9095E-78	254.58
ADN(de)YTYEHIR	1280.5786	IPI00273133	IPI00273133	yes	yes	2	0.020031	104.79
ADANPPATEYHWTTIN(de)GSIPK	2282.0968	IPI00311405	IPI00311405	yes	yes	2,3	0.0005902	107.65
ACN(de)ATNWIEYMFNK	1760.7651	IPI0013260C	IPI0013260C	yes	no	2	4.0563E-05	160.78
ACMN(de)ETRIIEIR	1520.7075	IPI0039684C	IPI0039684C	yes	no	2	0.0023808	131.06
AAN(de)CTQVIVWHTR	1554.7725	IPI00116744	IPI00116744	yes	yes	2	0.0013798	142.1
AAGVIEDVYN(de)RTQGIIAGHGIIQIA	2578.3867	IPI00169617	IPI00169617	yes	yes	2	1.0745E-08	161.2
AAEN(de)FTIIVK	1104.6179	IPI00471089	IPI00471089	yes	no	2	0.016008	108.9
AACAVRPQEVMTMVN(de)GTITNPVTGK	2513.273	IPI00308971	IPI00308971	yes	yes	2,3	1.198E-06	175.93
A(de)YVFERNQSVGDPNVDIIR	2191.1022	IPI00127447	IPI00127447	yes	yes	2,3	6.2046E-19	205.95
A(de)VAYGEKNITFQGPIPK	1831.9832	IPI00111794	IPI00111794	yes	no	2,3	2.9802E-27	219.97
A(de)RNISGVVIADHSGSFHNR	2036.03	IPI00118674	IPI00118674	yes	yes	3	0.014586	90.385
A(de)QAECRNTTHIIQR	1696.8427	IPI00321222	IPI00321222	yes	yes	2,3	0.025582	94.122

N-terminal Ser/Thr  
ratio

15  
1.04%