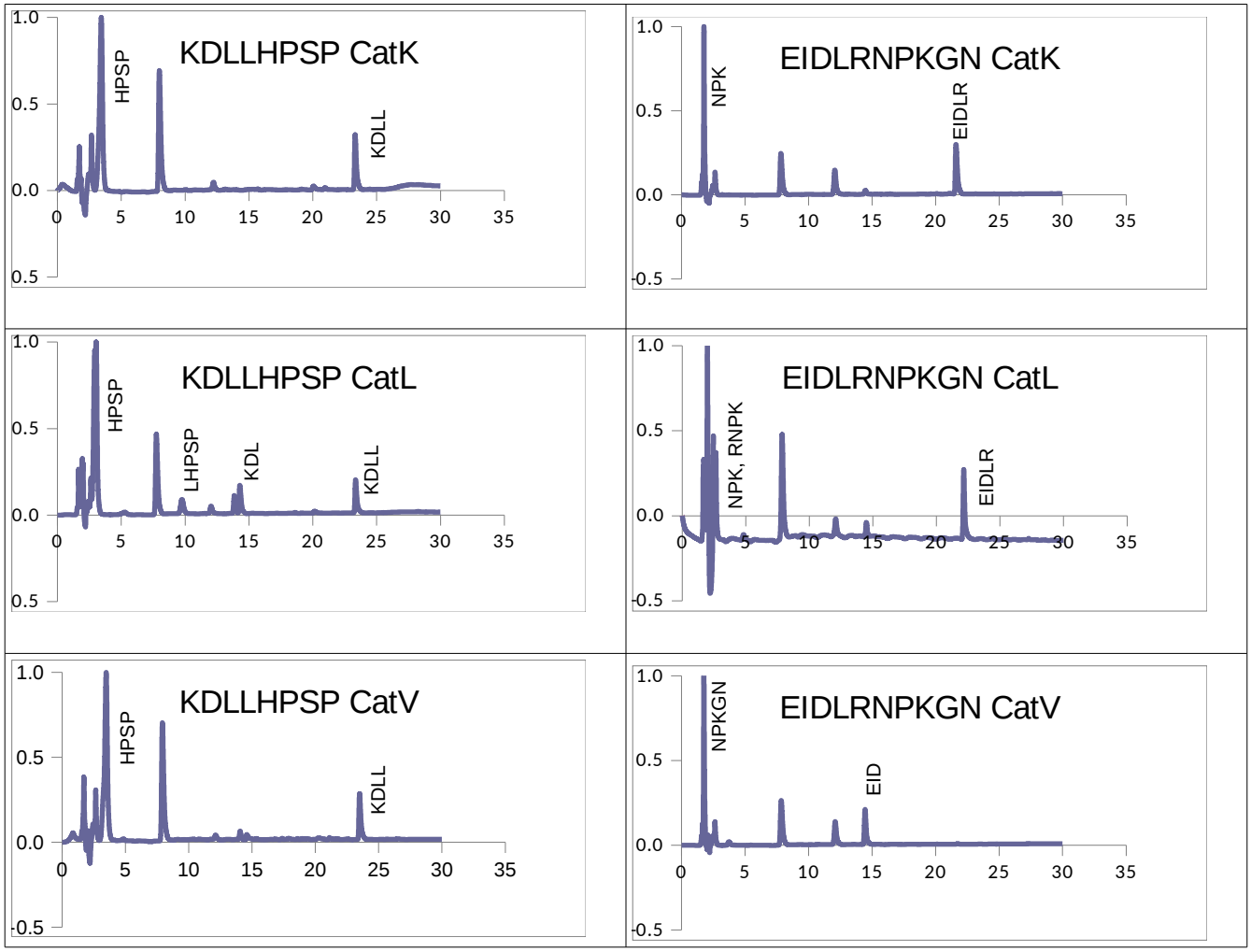
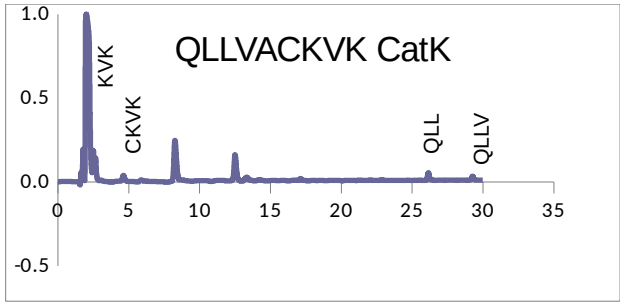
Supplementary Data 4. Peptide cleavage analysis.

a. Peptide fragment identification. Peptides treated with cathepsins were applied on RP-HPLC. Peaks representing the peptide fragments were captured. Separation was monitored at 214 nm. Y-axis show normalized signal of absorbance at A_{214} and x-axis represent separation time in minutes. Peptide sequences as identified with MALDI-TOF are written on top or next to their corresponding HPLC signal. Characteristics signals at around 8 min and 12 min correspond to buffer component dithiotheritrol (DTT) and cathepsin, respectively.

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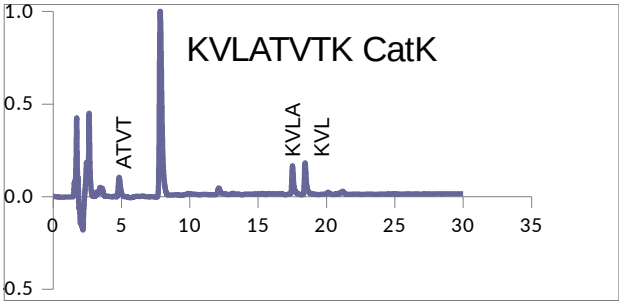
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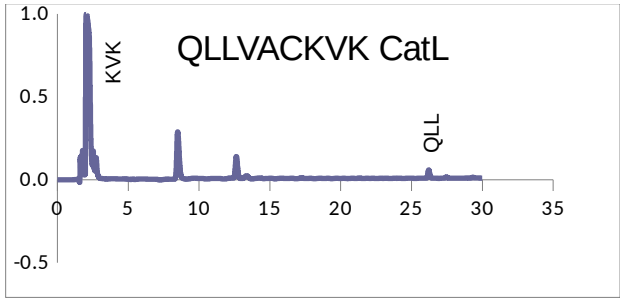
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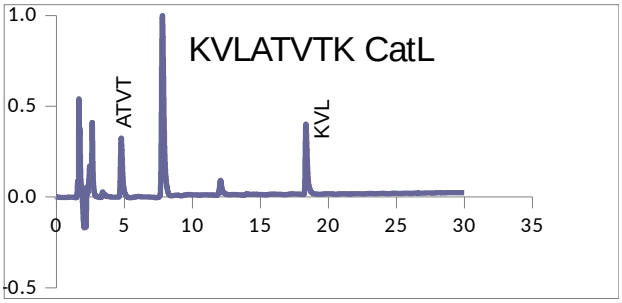
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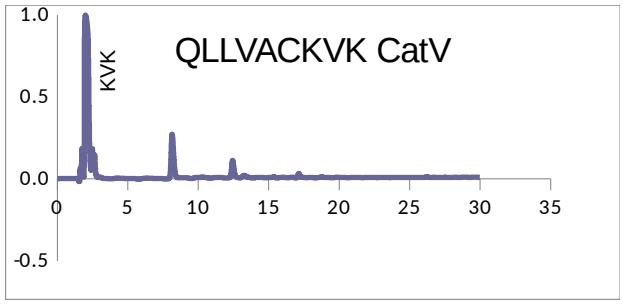
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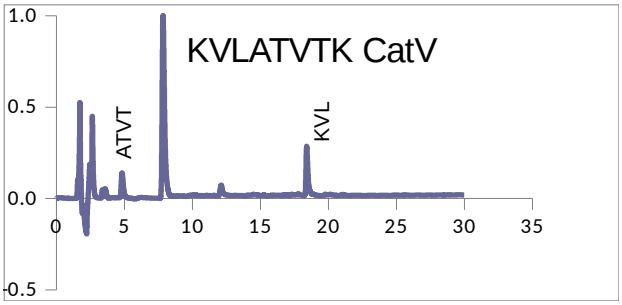
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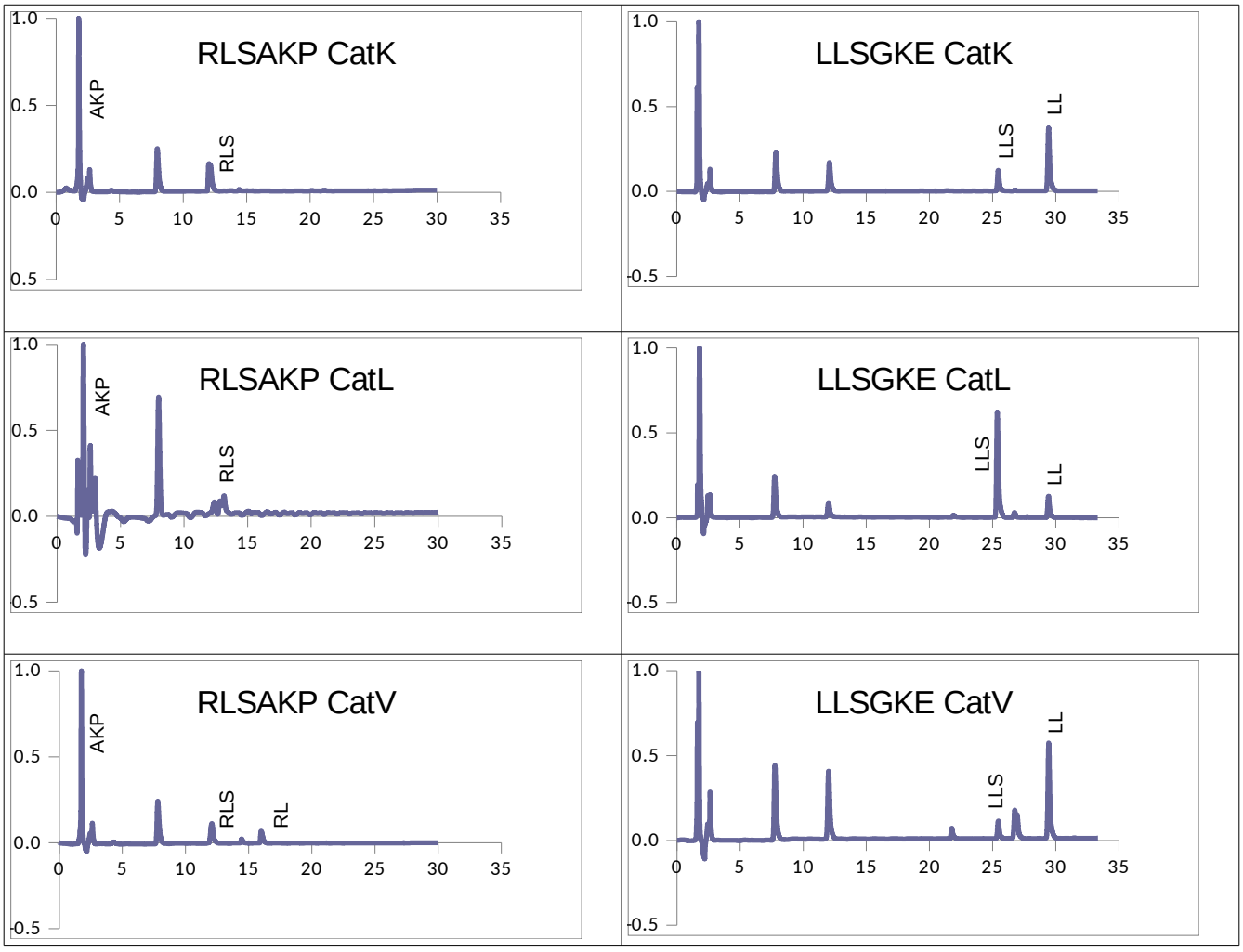
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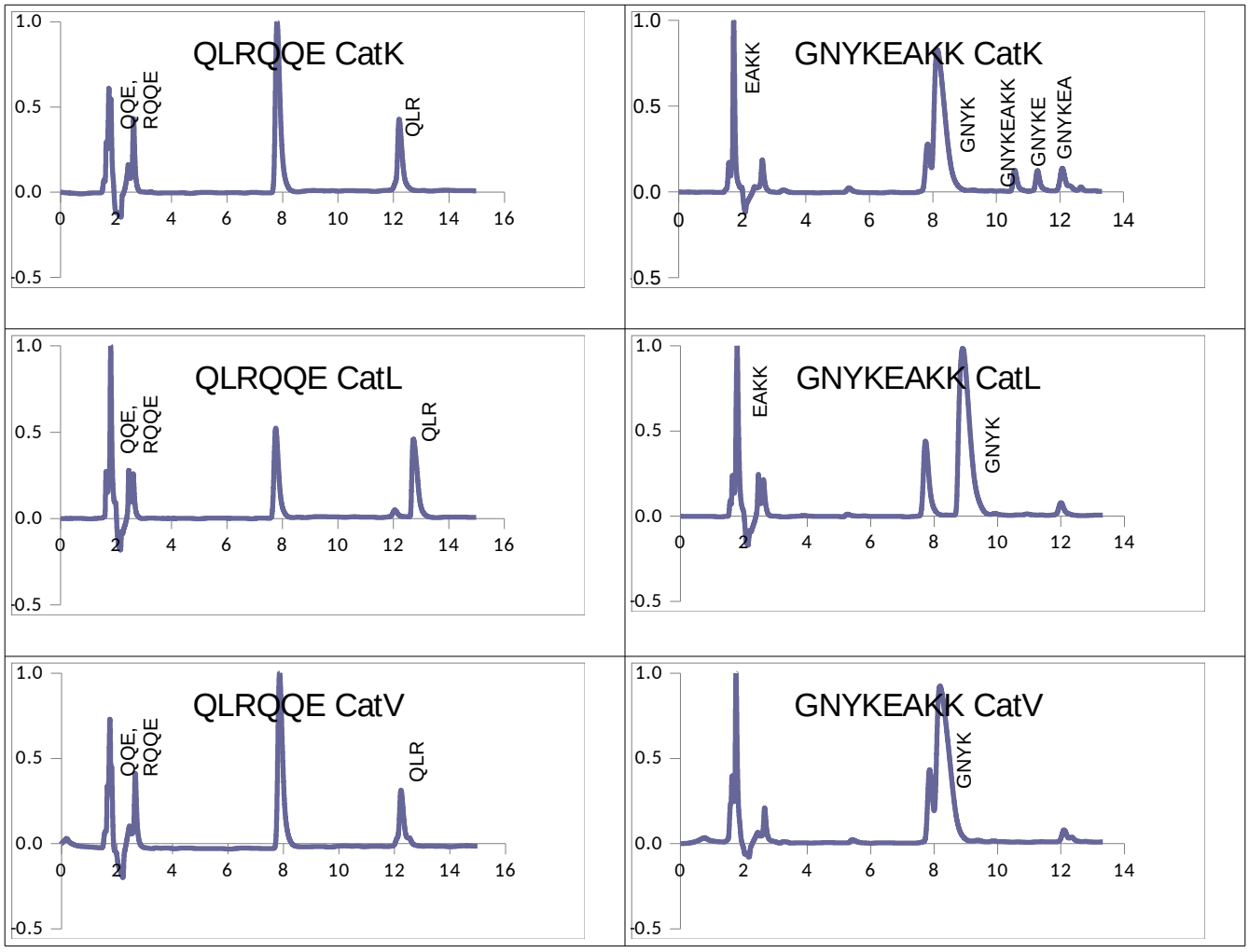
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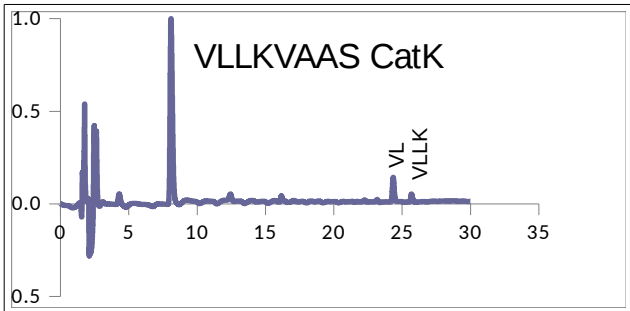
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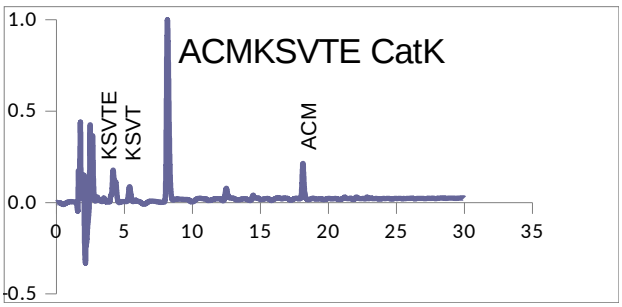
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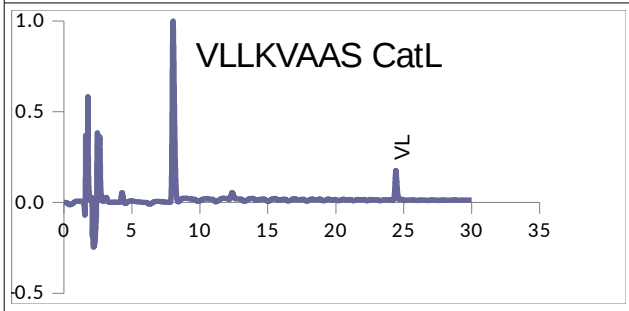
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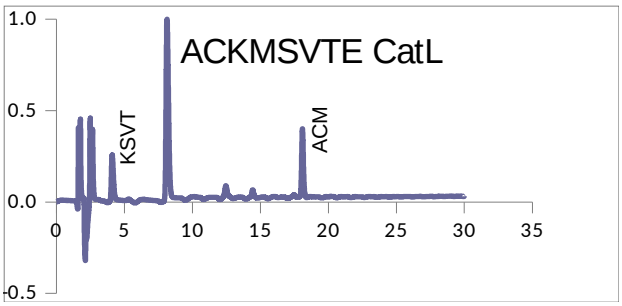
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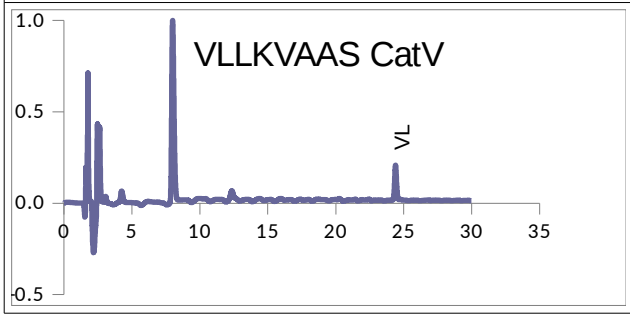
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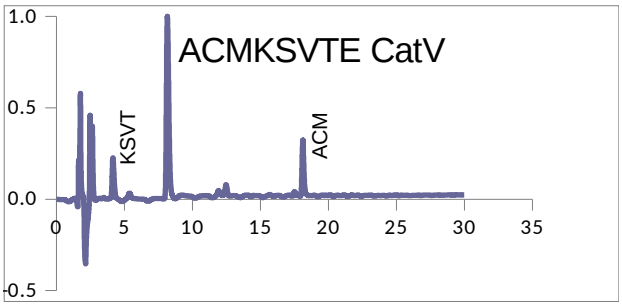
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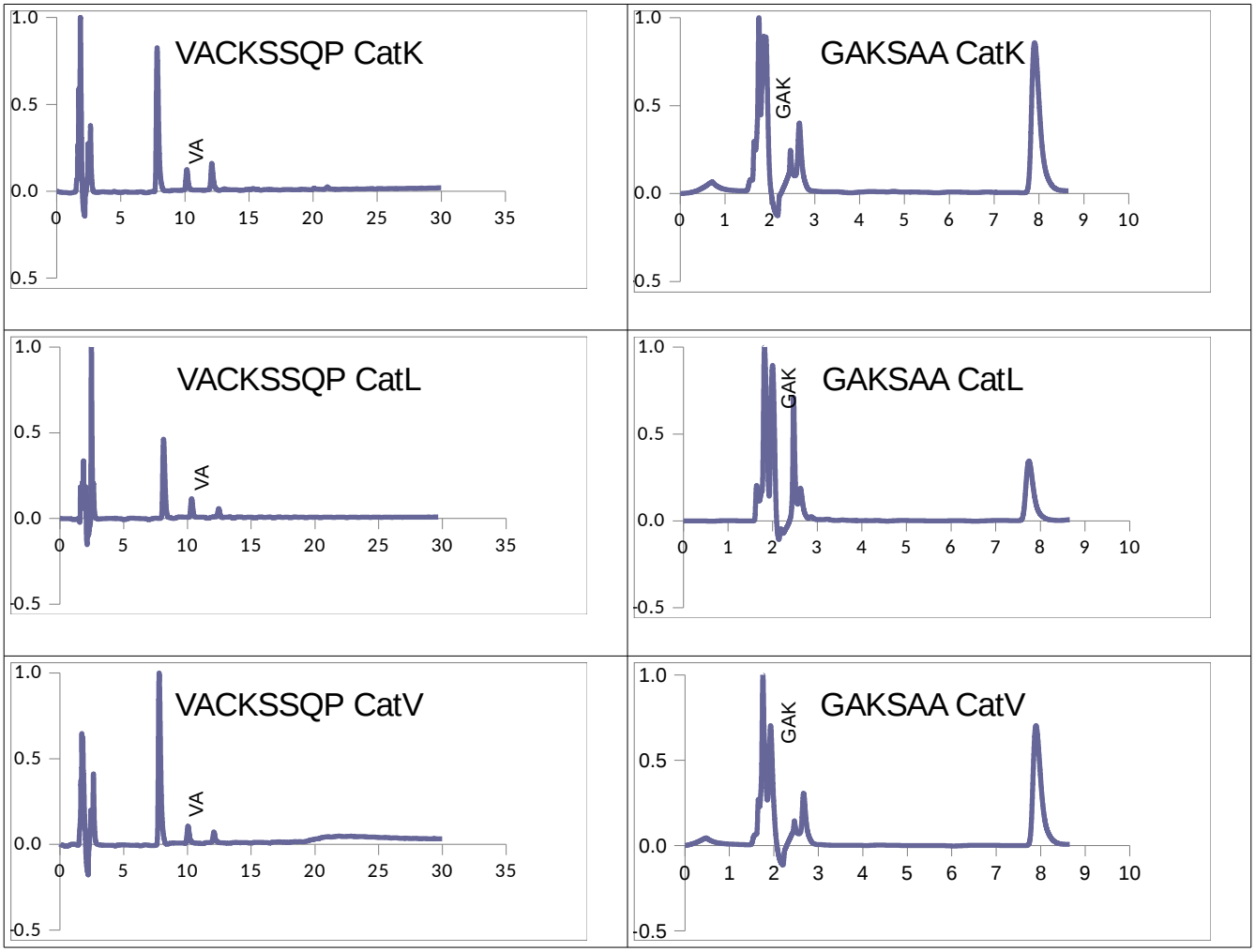
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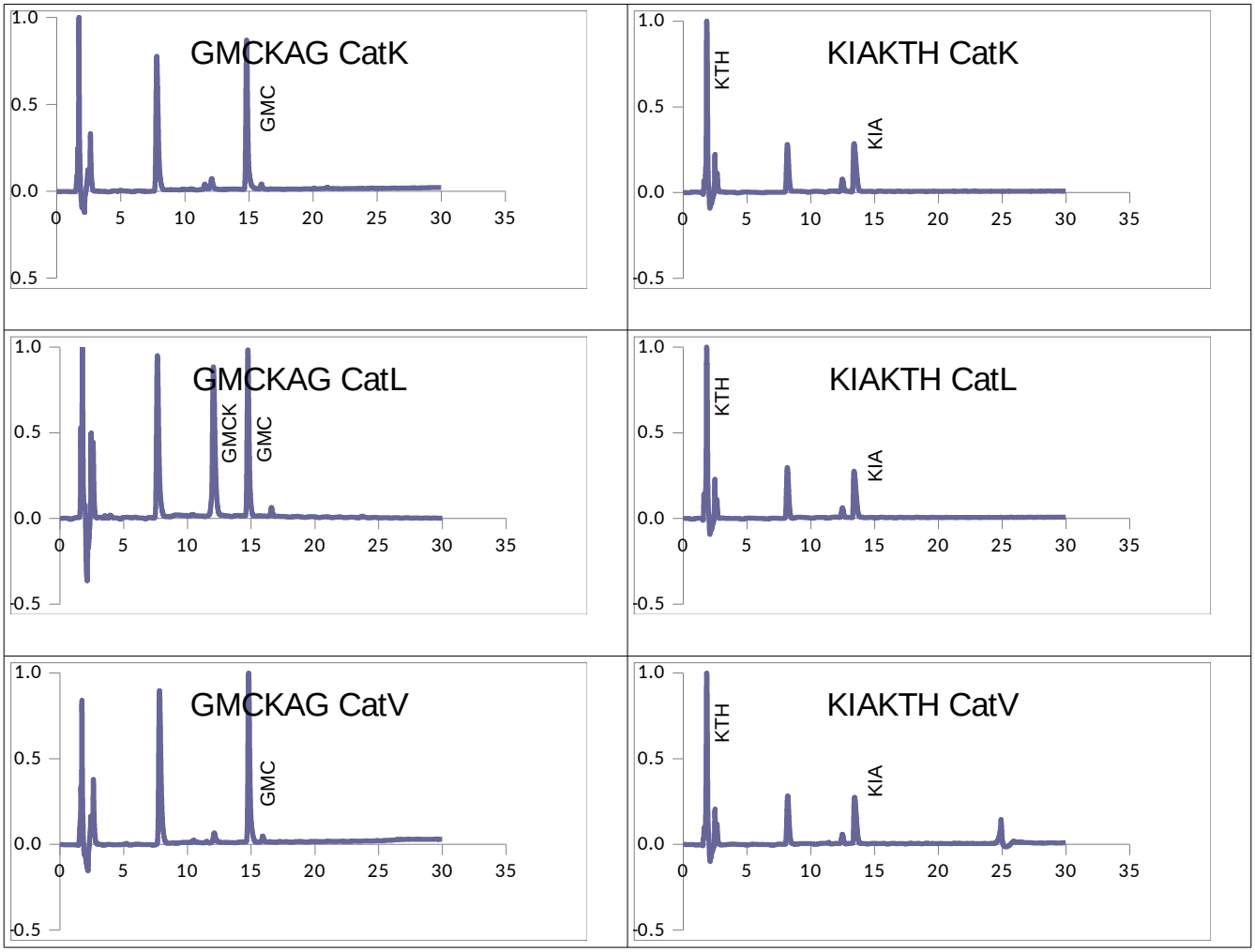
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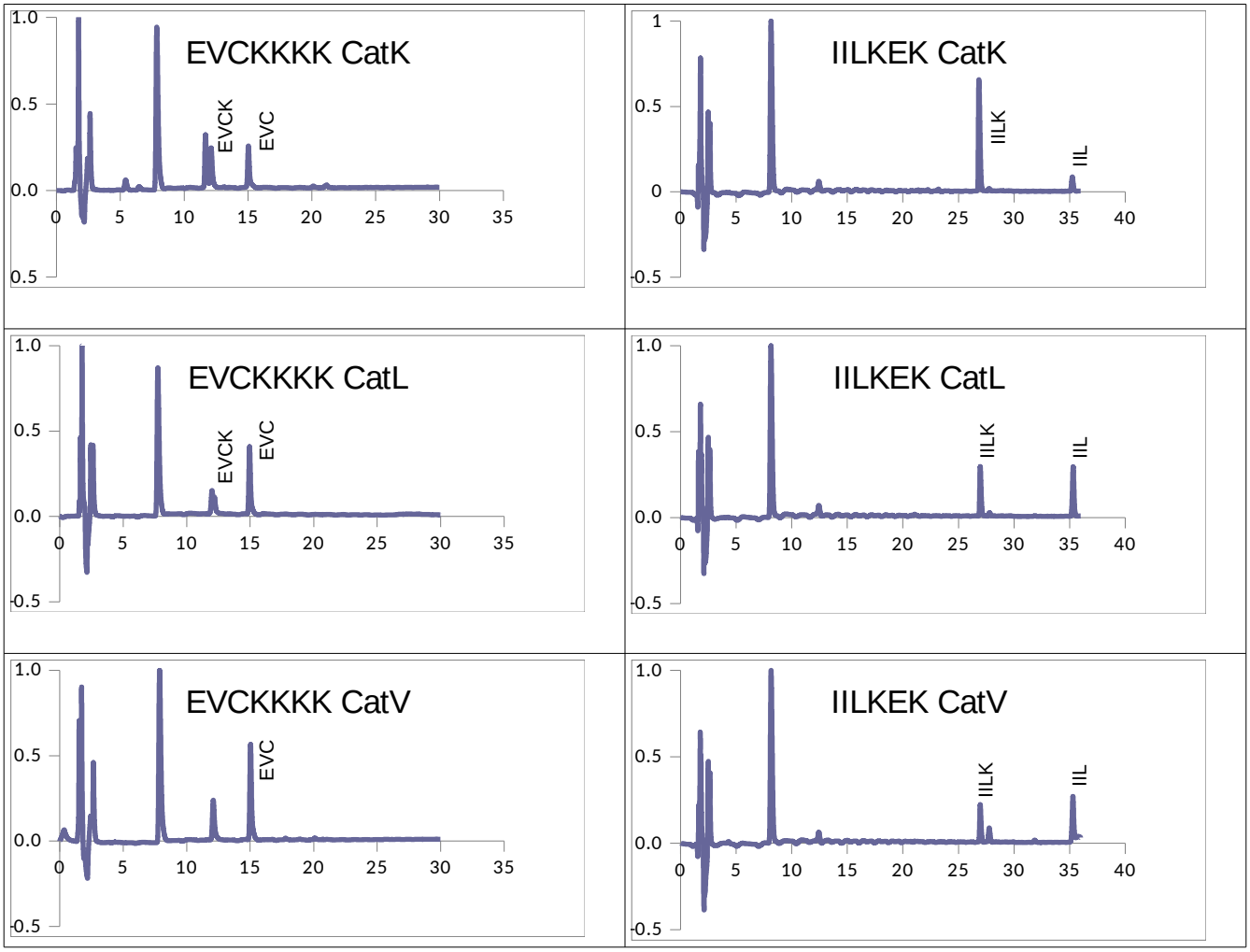
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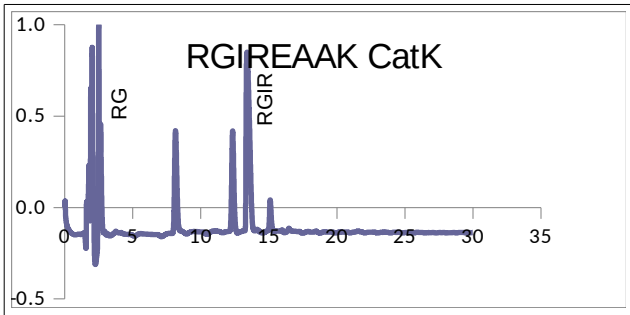
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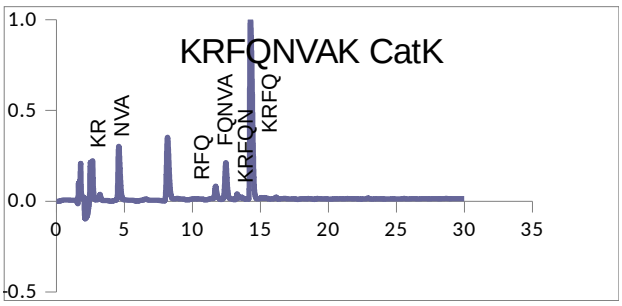
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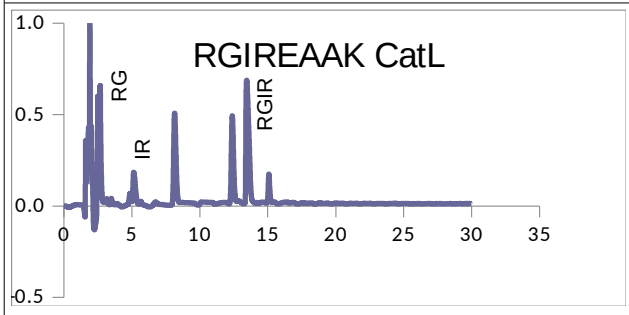
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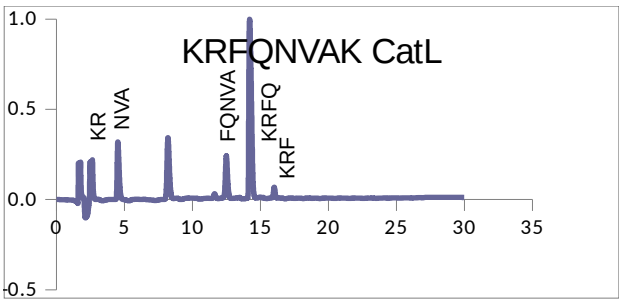
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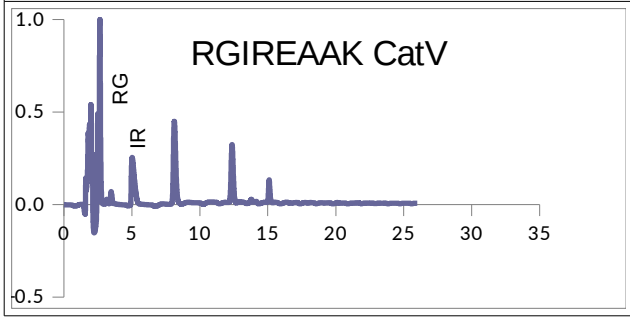
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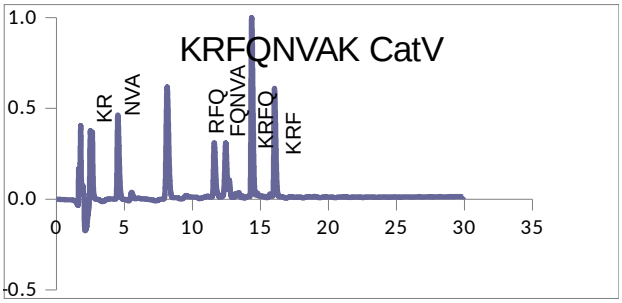
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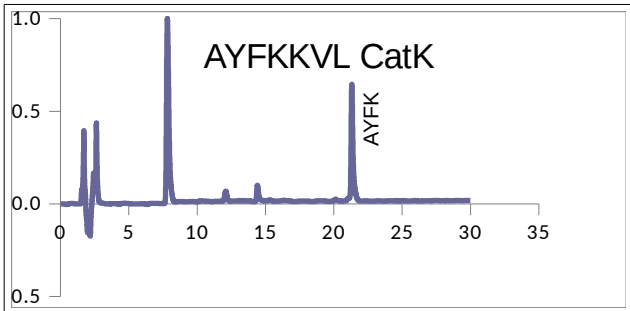
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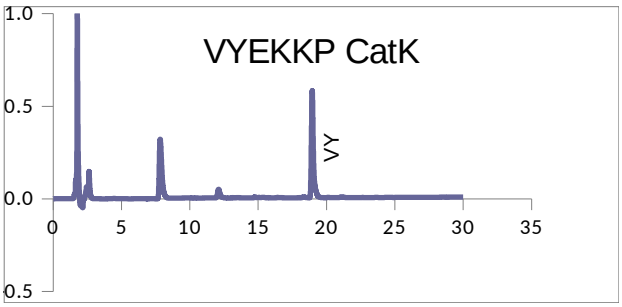
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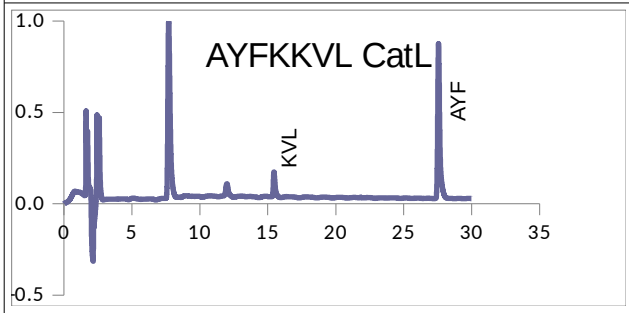
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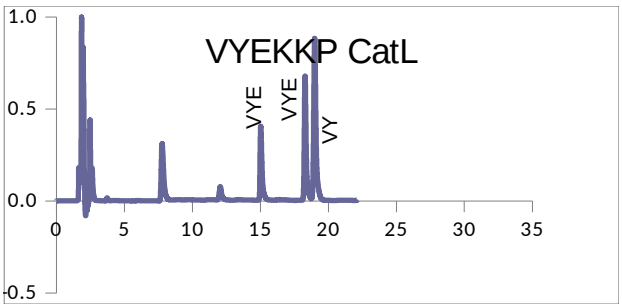
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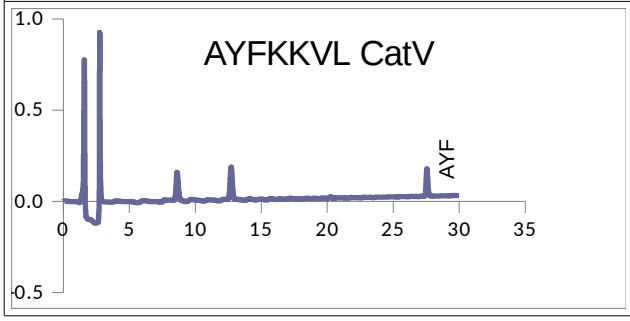
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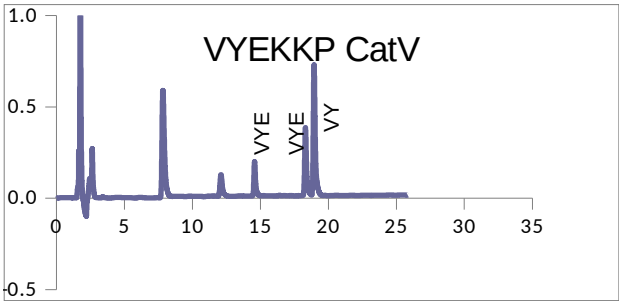
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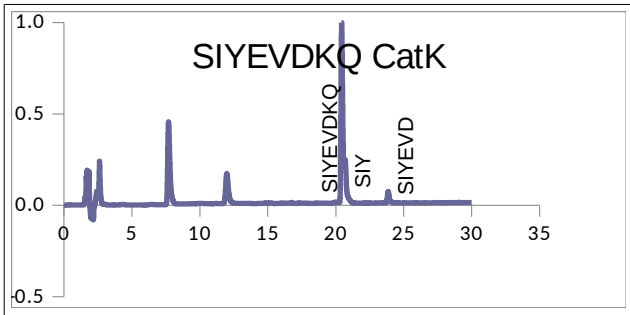
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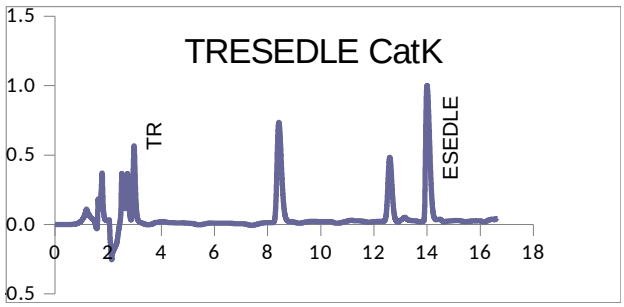
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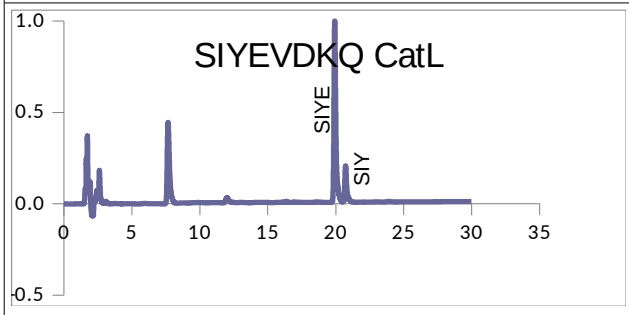
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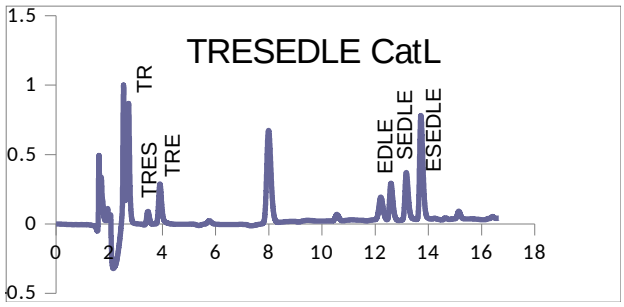
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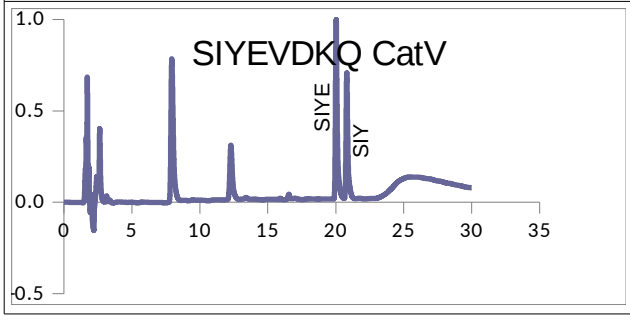
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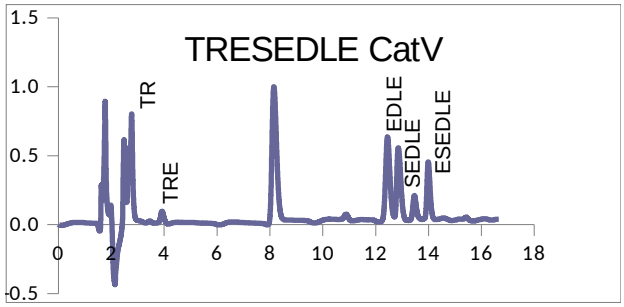
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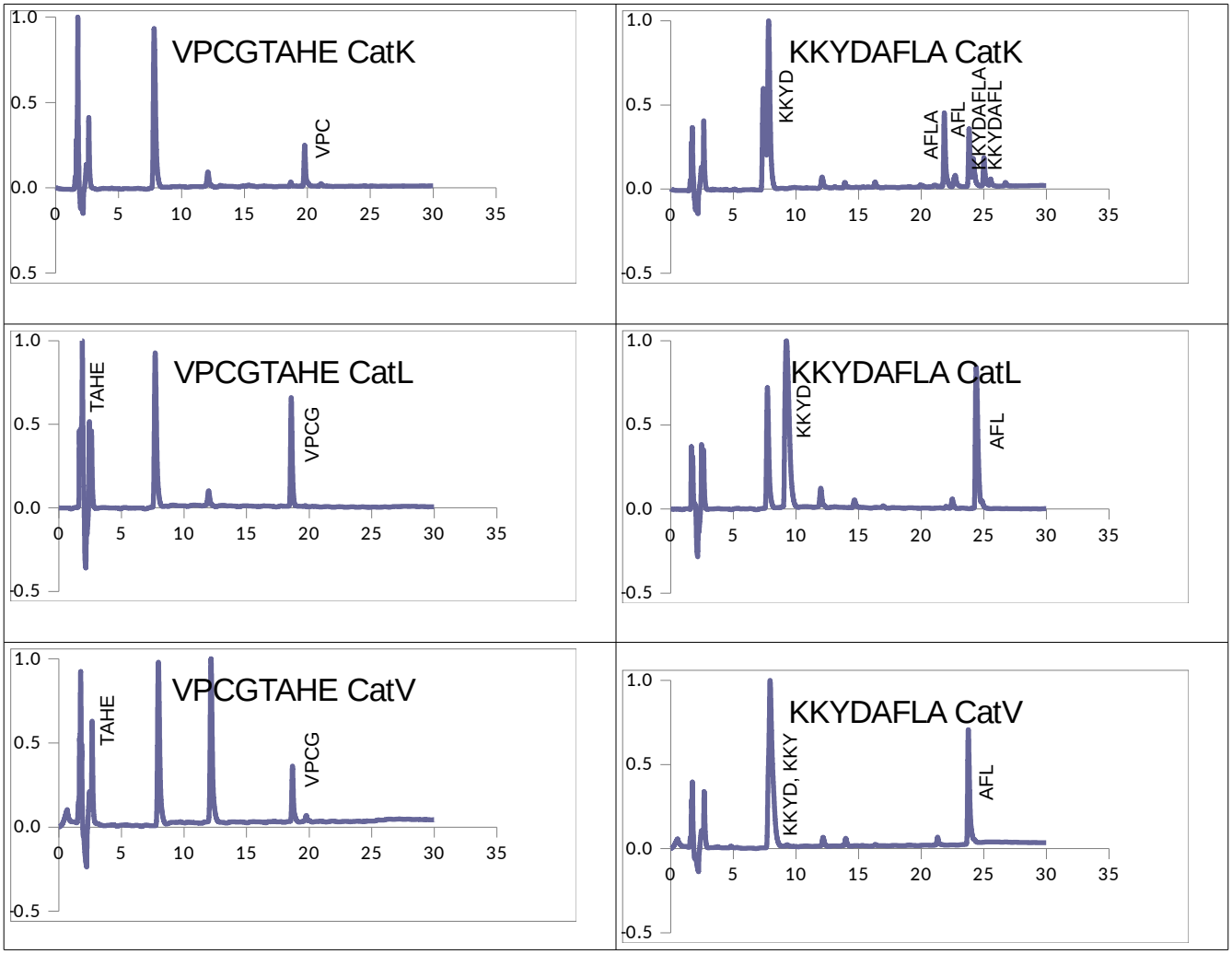
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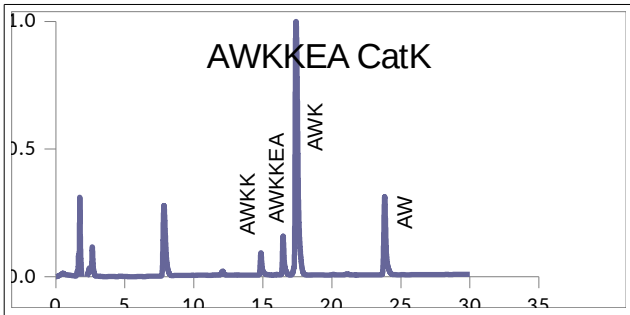
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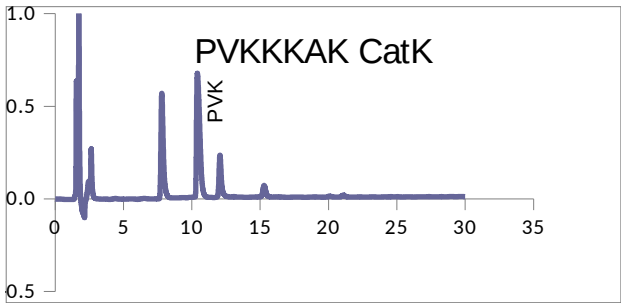
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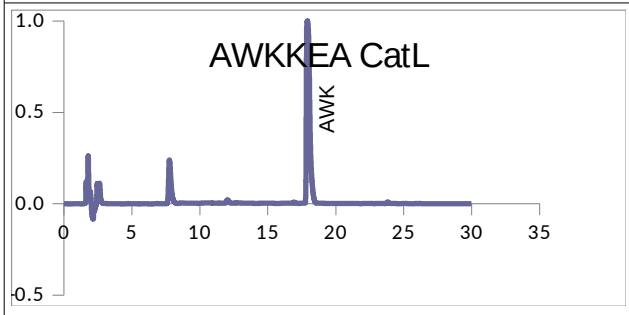
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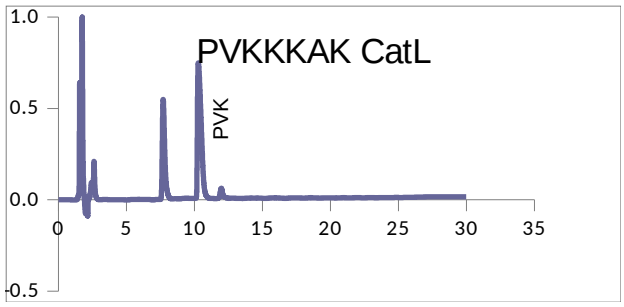
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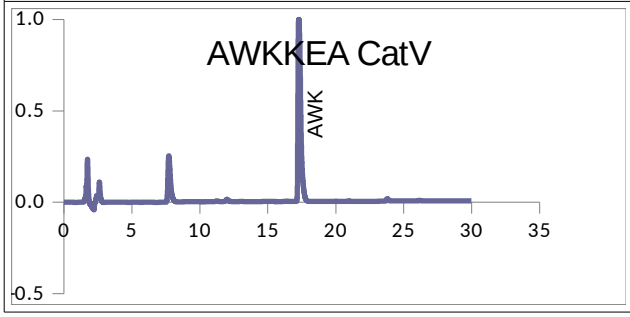
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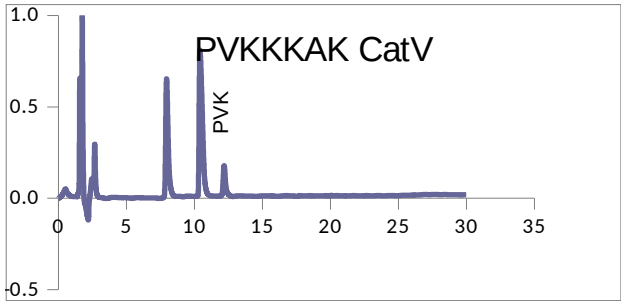
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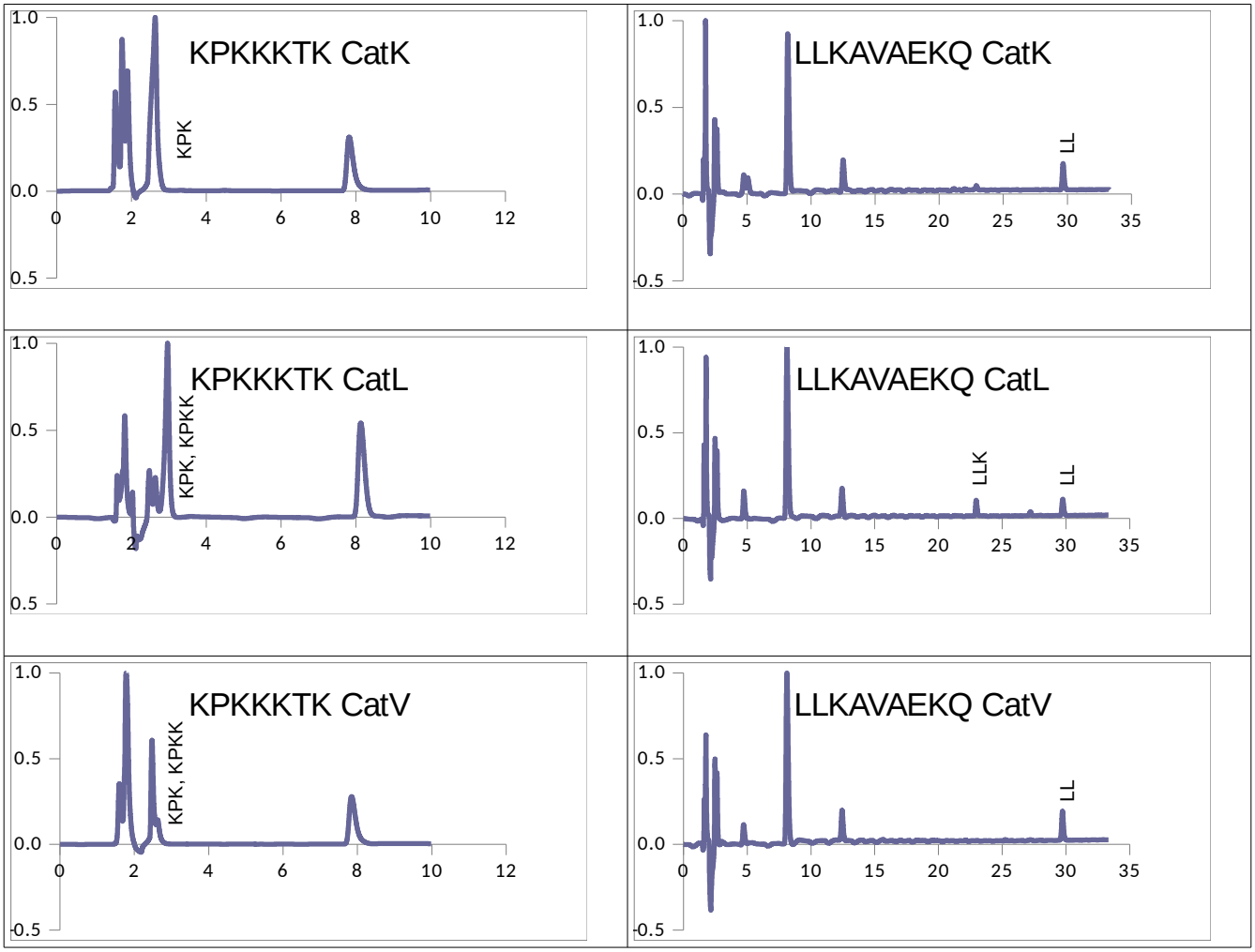
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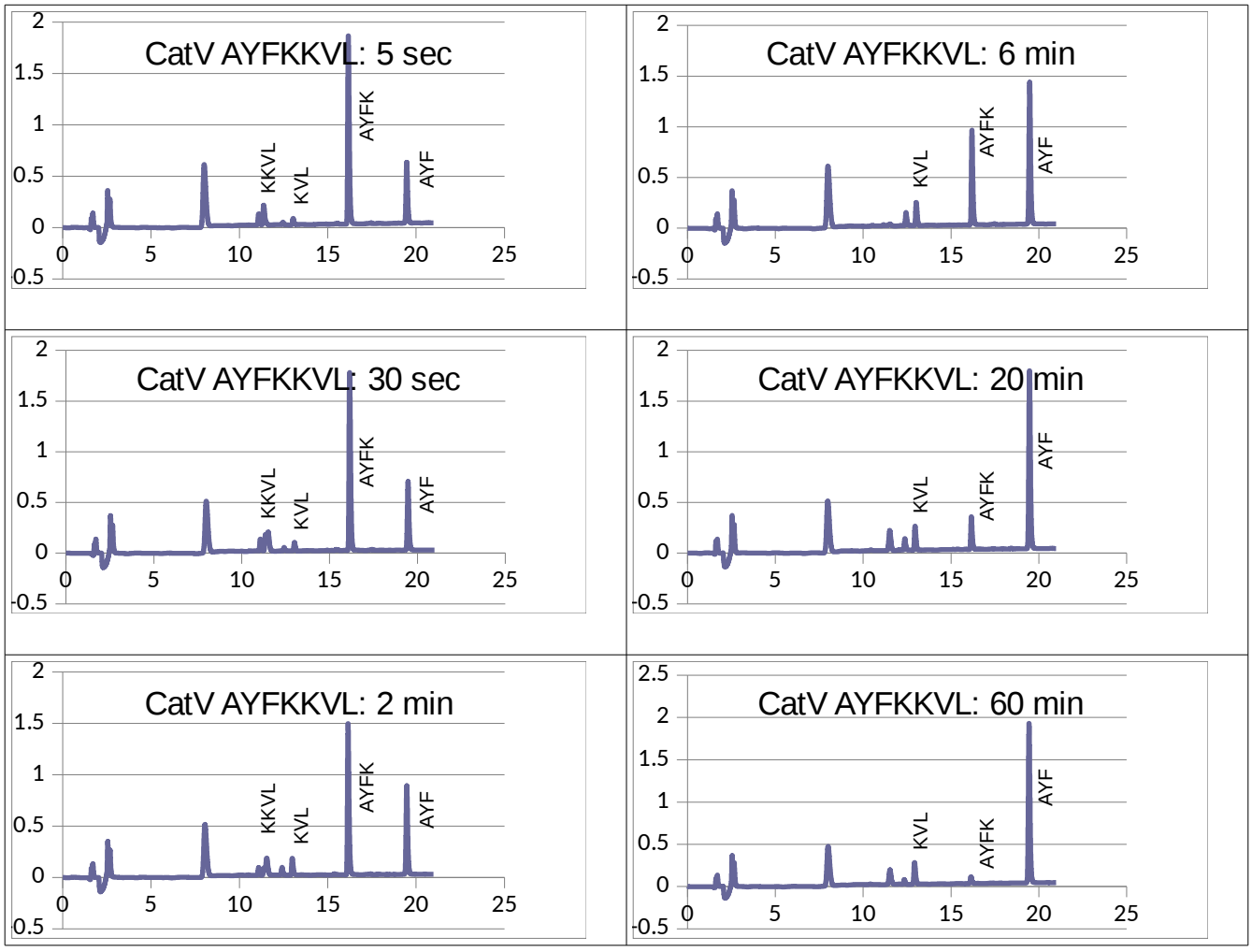
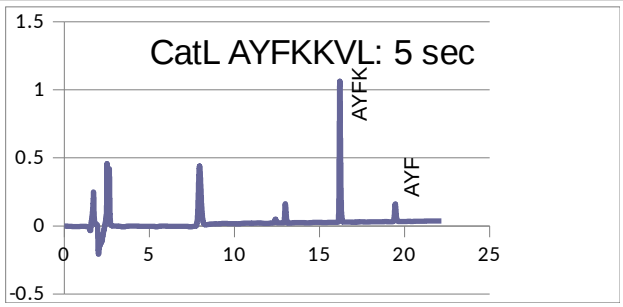
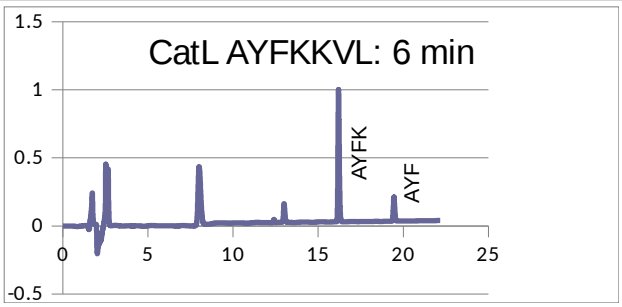
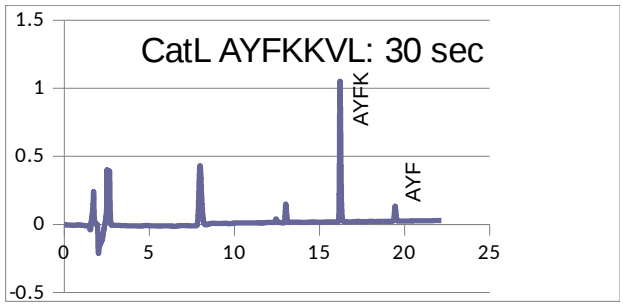
LLKAVAEKQ CatV
LL

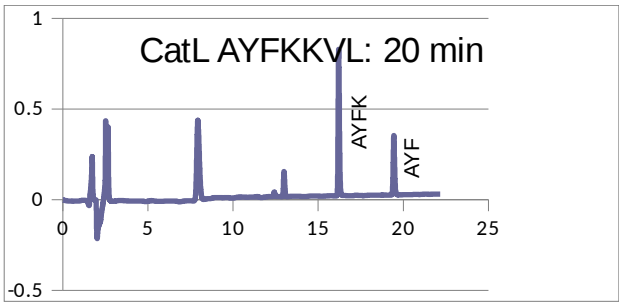
b. Processing of peptides AYFKKVL and KVLATVTK from 5 s–60 min. Peptides treated with cathepsins were applied on RP-HPLC. Peaks representing the peptide fragments were captured. Separation was monitored at 214 nm. Y-axis show signal of absorbance at A_{214} and x-axis represent separation time in minutes. Response at Y-axis is not normalized in order to quantitatively compare fragment signals at different time points. Peptide sequences as identified with MALDI-TOF are written on top or next to their corresponding HPLC signal. Characteristics signals at around 8 min and 12 min correspond to buffer component dithiotheritrol (DTT) and cathepsin, respectively. Aliquots were taken after 5 s, 30 s, 2 min, 6 min, 20 min, and 60 min of incubation with cathepsins V and L (both peptides) or K (peptide KVLATVTK).

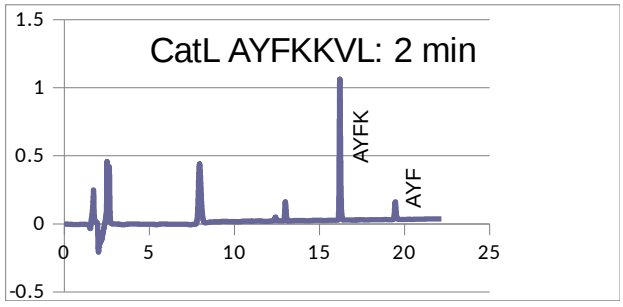


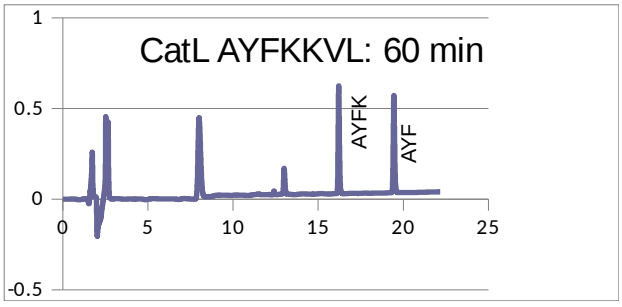

CatL AYFKKVL: 5 sec
AYFK
AYF
1.5
1
0.5
0
-0.5
0
5
10
15
20
25

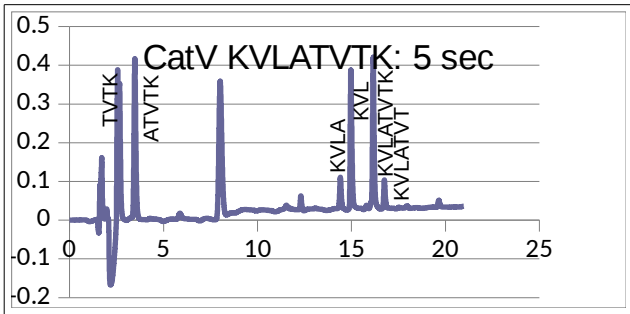

CatL AYFKKVL: 6 min
AYFK
AYF
1.5
1
0.5
0
-0.5
0
5
10
15
20
25

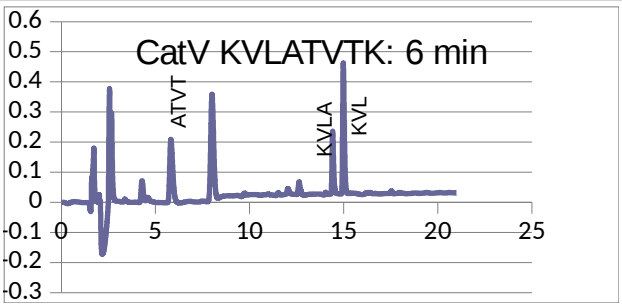

CatL AYFKKVL: 30 sec
AYFK
AYF
1.5
1
0.5
0
-0.5
0
5
10
15
20
25

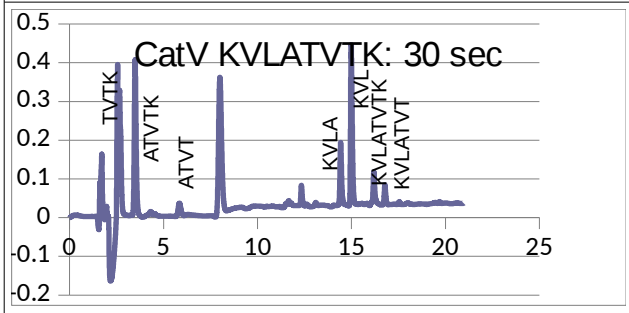

CatL AYFKKVL: 20 min
AYFK
AYF
1
0.5
0
-0.5
0
5
10
15
20
25

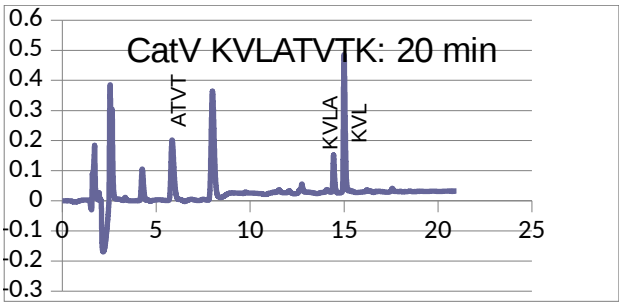

CatL AYFKKVL: 2 min
AYFK
AYF
1.5
1
0.5
0
-0.5
0
5
10
15
20
25

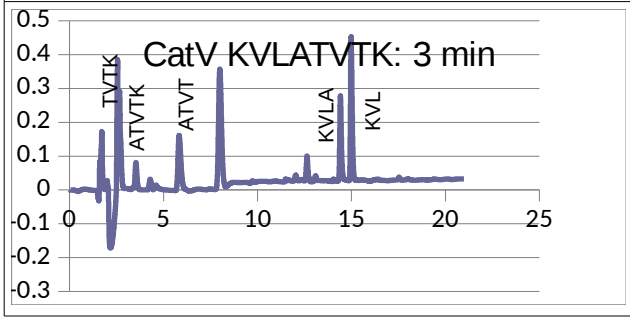

CatL AYFKKVL: 60 min
AYFK
AYF
1
0.5
0
-0.5
0
5
10
15
20
25

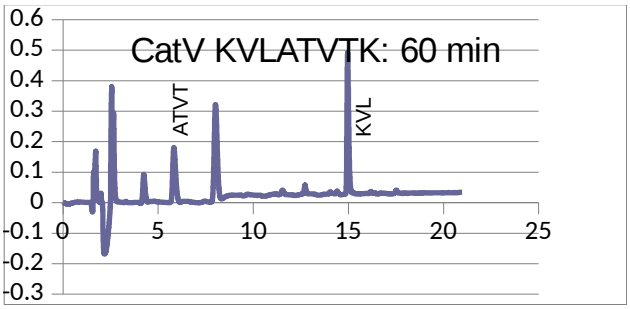

CatV KVLATVTK: 5 sec
TVTK
ATVTK
KVLA
KVL
KVLATVTK
KVLATVT

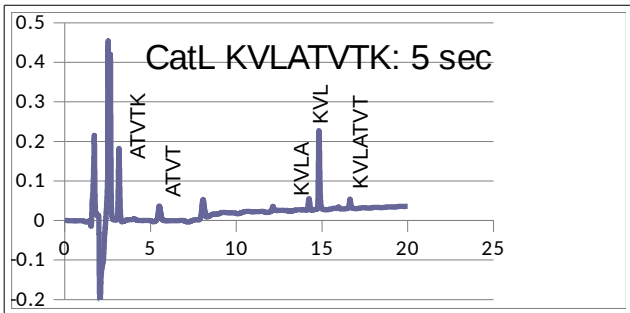

CatV KVLATVTK: 6 min
ATVT
KVLA
KVL

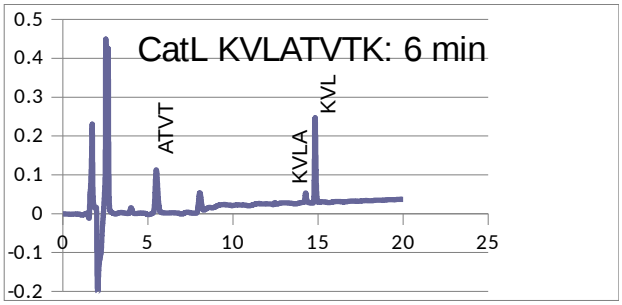

CatV KVLATVTK: 30 sec
TVTK
ATVTK
ATVT
KVLA
KVL
KVLATVTK
KVLATVT

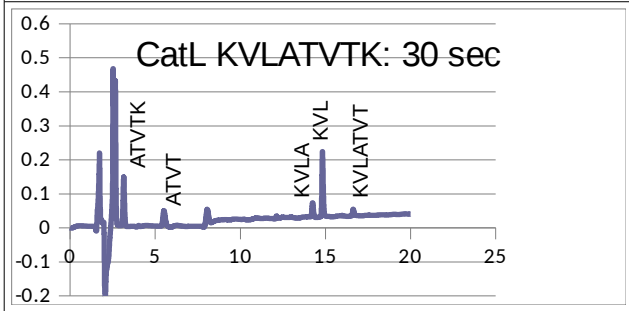

CatV KVLATVTK: 20 min
ATVT
KVLA
KVL

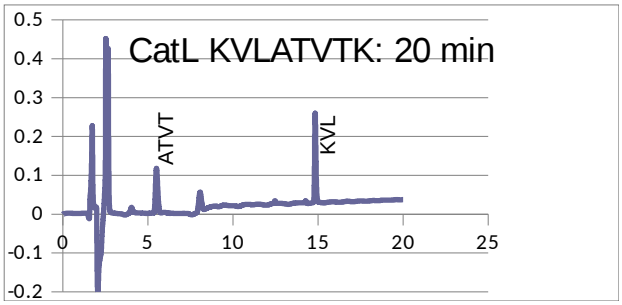

CatV KVLATVTK: 3 min
TVTK
ATVTK
ATVT
KVLA
KVL

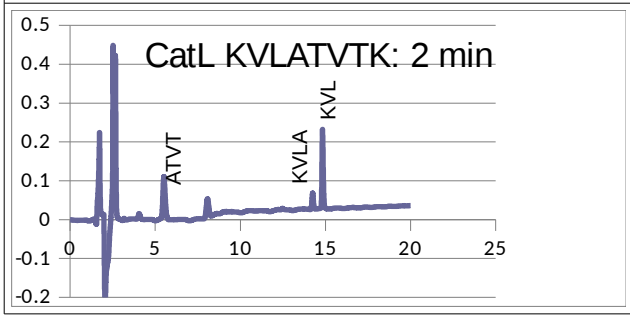

CatV KVLATVTK: 60 min
ATVT
KVL

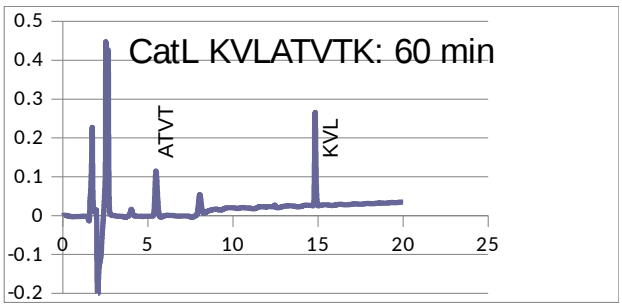

CatL KVLATVTK: 5 sec
ATVTK
ATVT
KVLA
KVL
KVLATVT

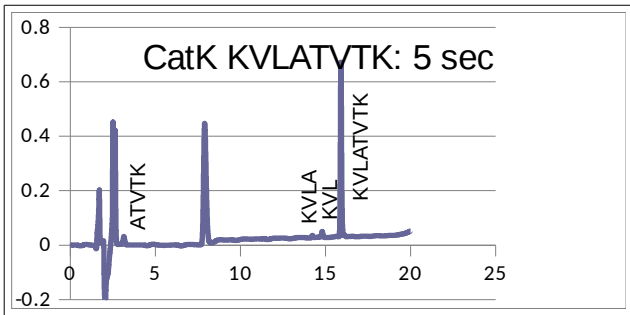

CatL KVLATVTK: 6 min
ATVT
KVLA
KVL

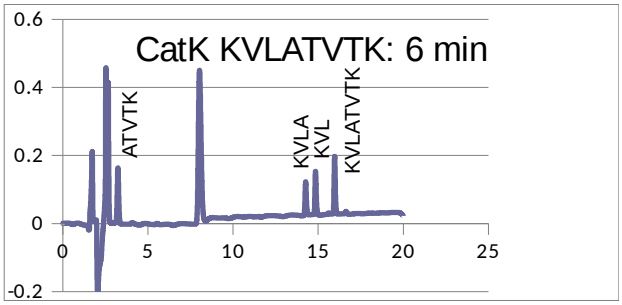

CatL KVLATVTK: 30 sec
ATVTK
ATVT
KVLA
KVL
KVLATVT

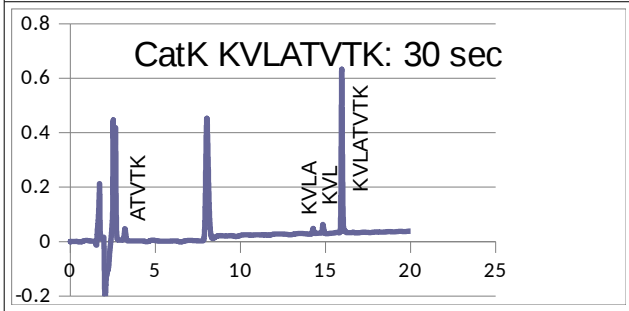

CatL KVLATVTK: 20 min
ATVT
KVL

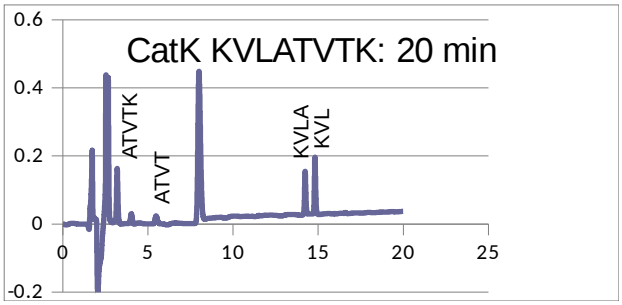

CatL KVLATVTK: 2 min
ATVT
KVLA
KVL

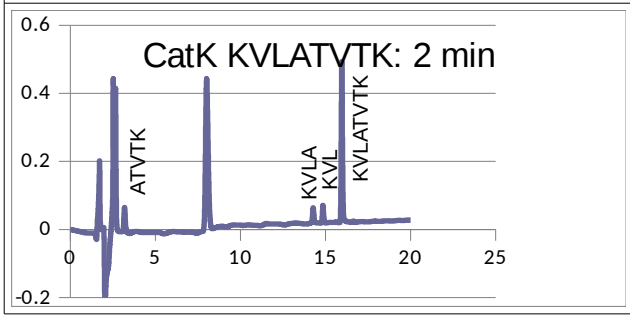

CatL KVLATVTK: 60 min
ATVT
KVL

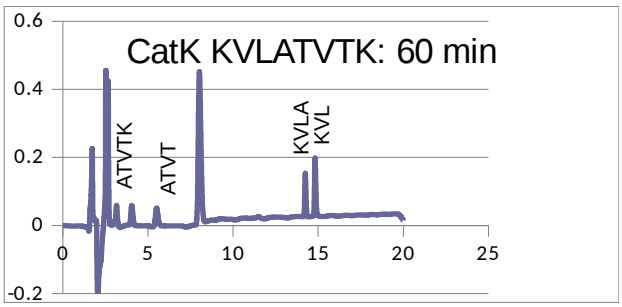

CatK KVLATVTK: 5 sec
ATVTK
KVLA
KVL
KVLATVTK


CatK KVLATVTK: 6 min
ATVTK
KVLA
KVL
KVLATVTK


CatK KVLATVTK: 30 sec
ATVTK
KVLA
KVL
KVLATVTK


CatK KVLATVTK: 20 min
ATVTK
ATVT
KVLA
KVL


CatK KVLATVTK: 2 min
ATVTK
KVLA
KVL
KVLATVTK


CatK KVLATVTK: 60 min
ATVTK
ATVT
KVLA
KVL