

**Glycoproteomics:
the Identification of Different Glycosylation
of the Prostate Specific Antigen
at Normal and High Isoelectric Point
by LC-MS/MS**

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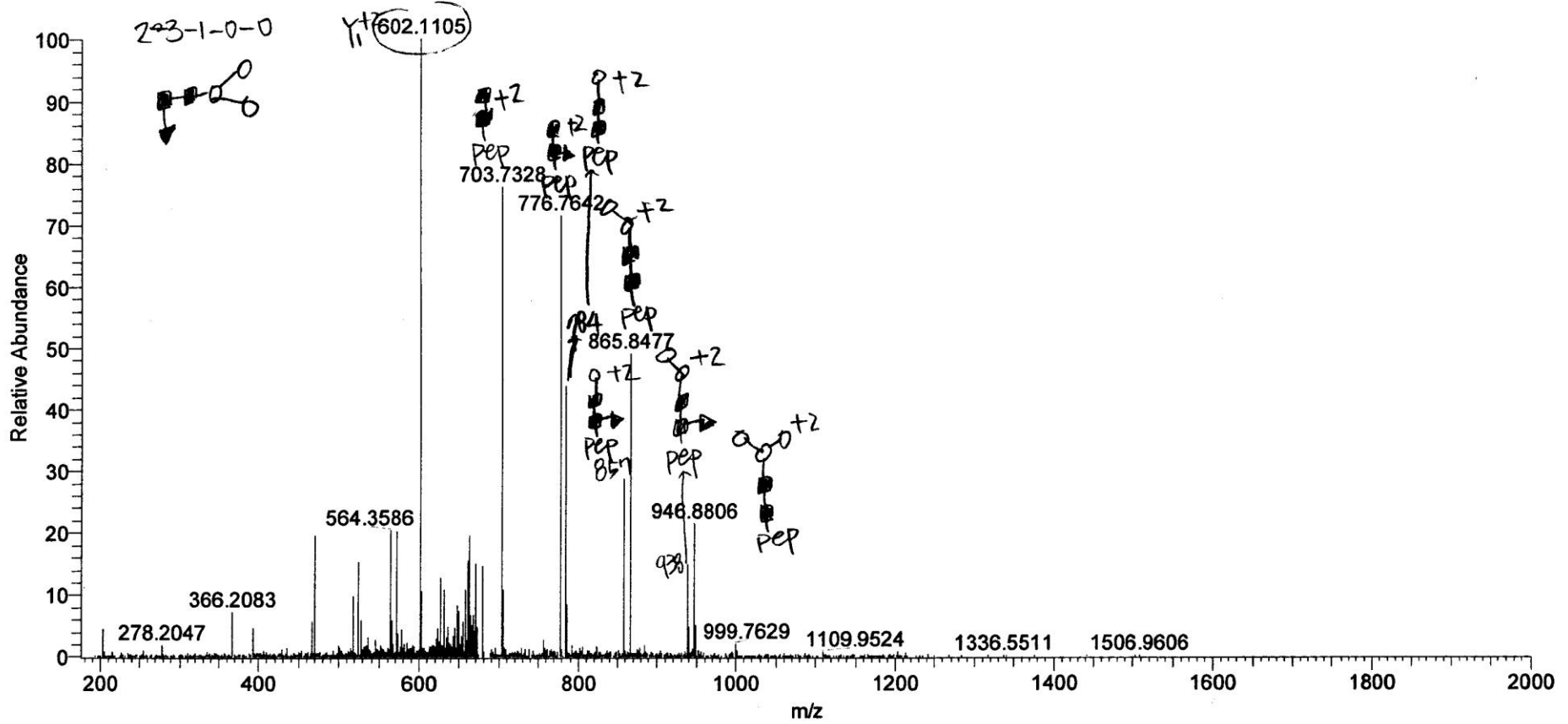
Fax: 806-742-1289

Keywords: Prostate specific antigen, PSA, N-linked glycosylation, glycopeptide, glycoproteomics, LC-MS/MS.

Supplementary Figure 1. Manual annotations of CID MS/MS of 38 glycopeptides from PSA or PSAH.

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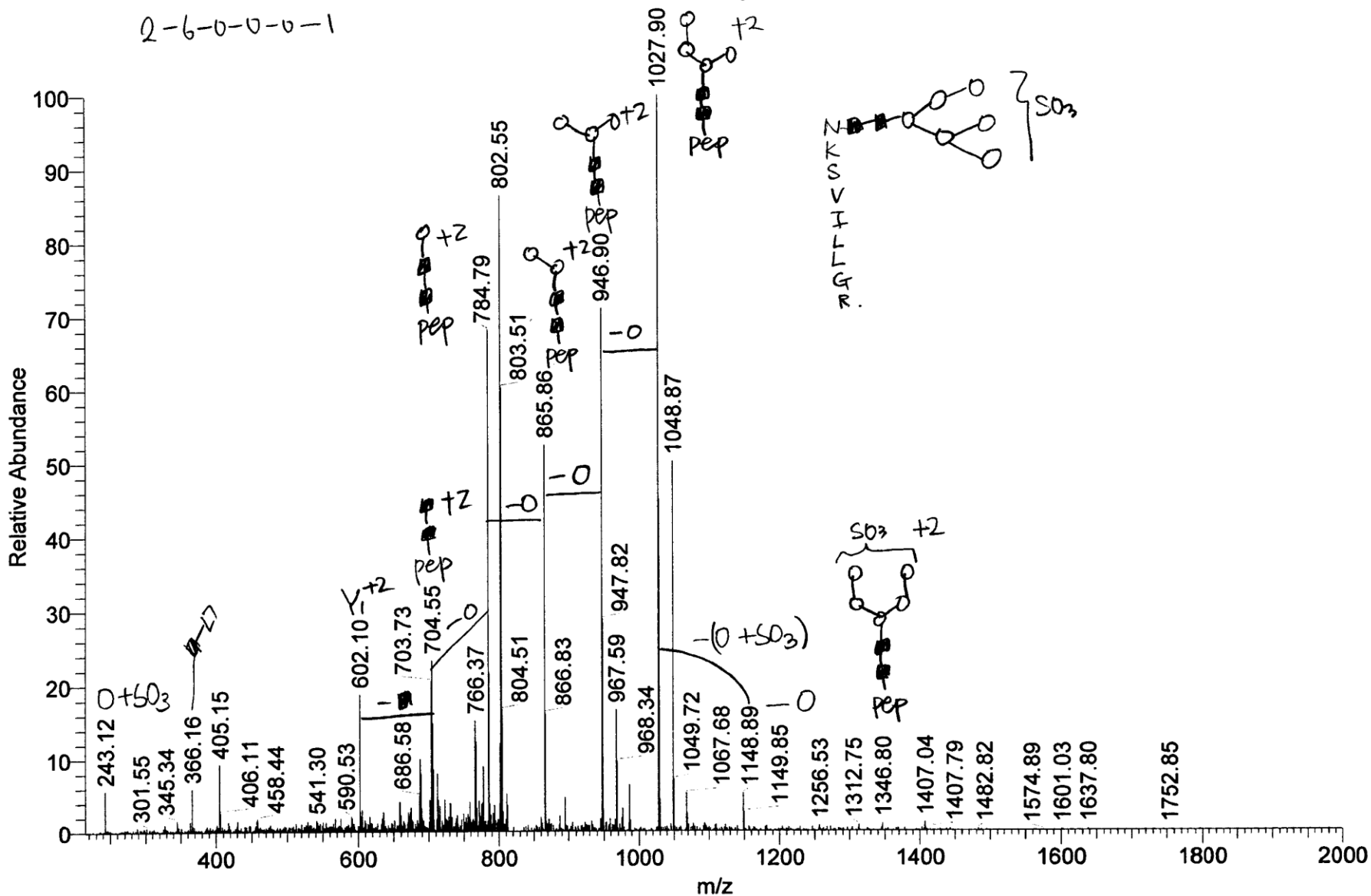
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+3, 820.0306

2-6-0-0-0-1



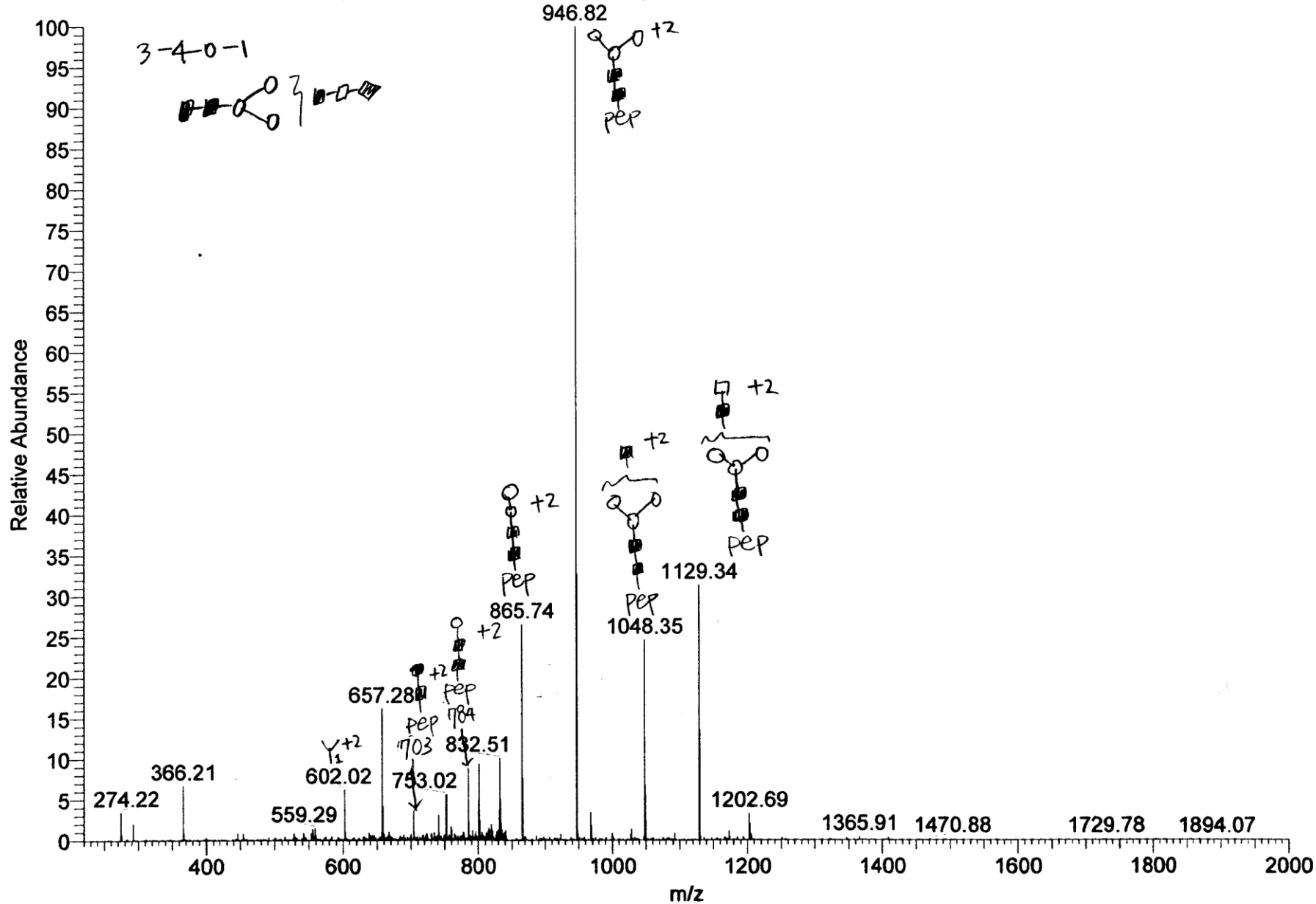
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6/30/2017 12:24:11 PM

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+7. 850.0665 · 2547.0565

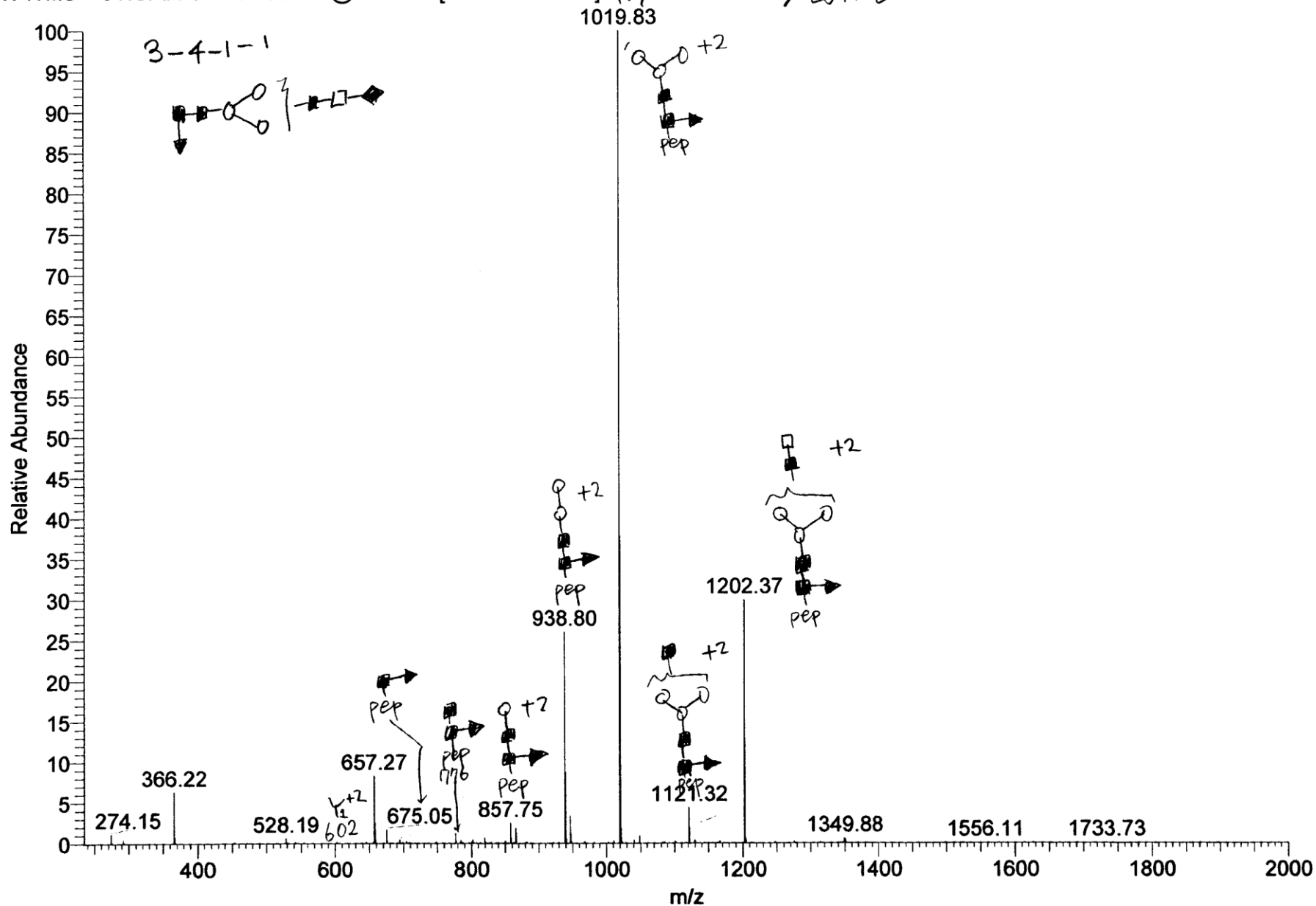


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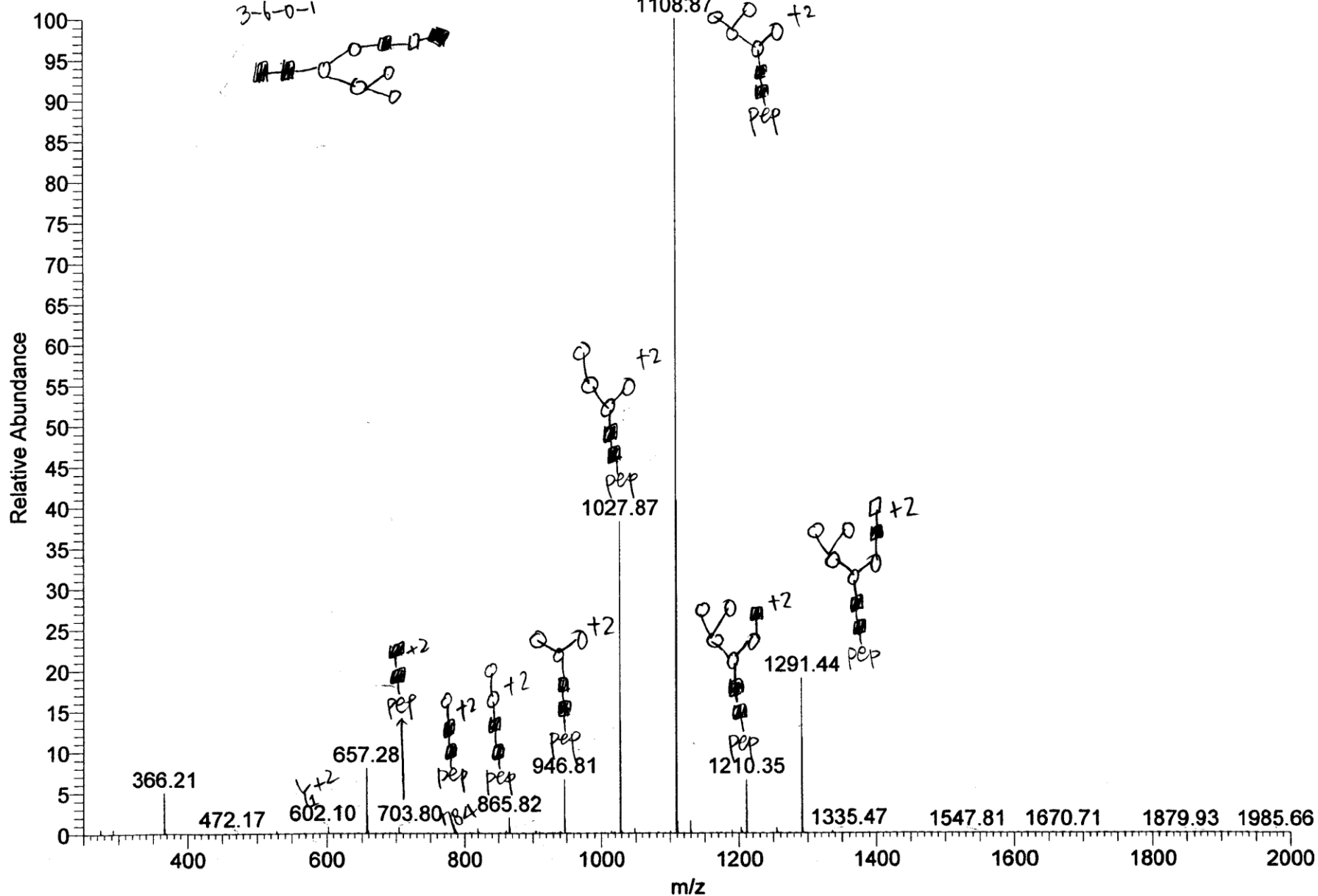


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1108.87 1291.44

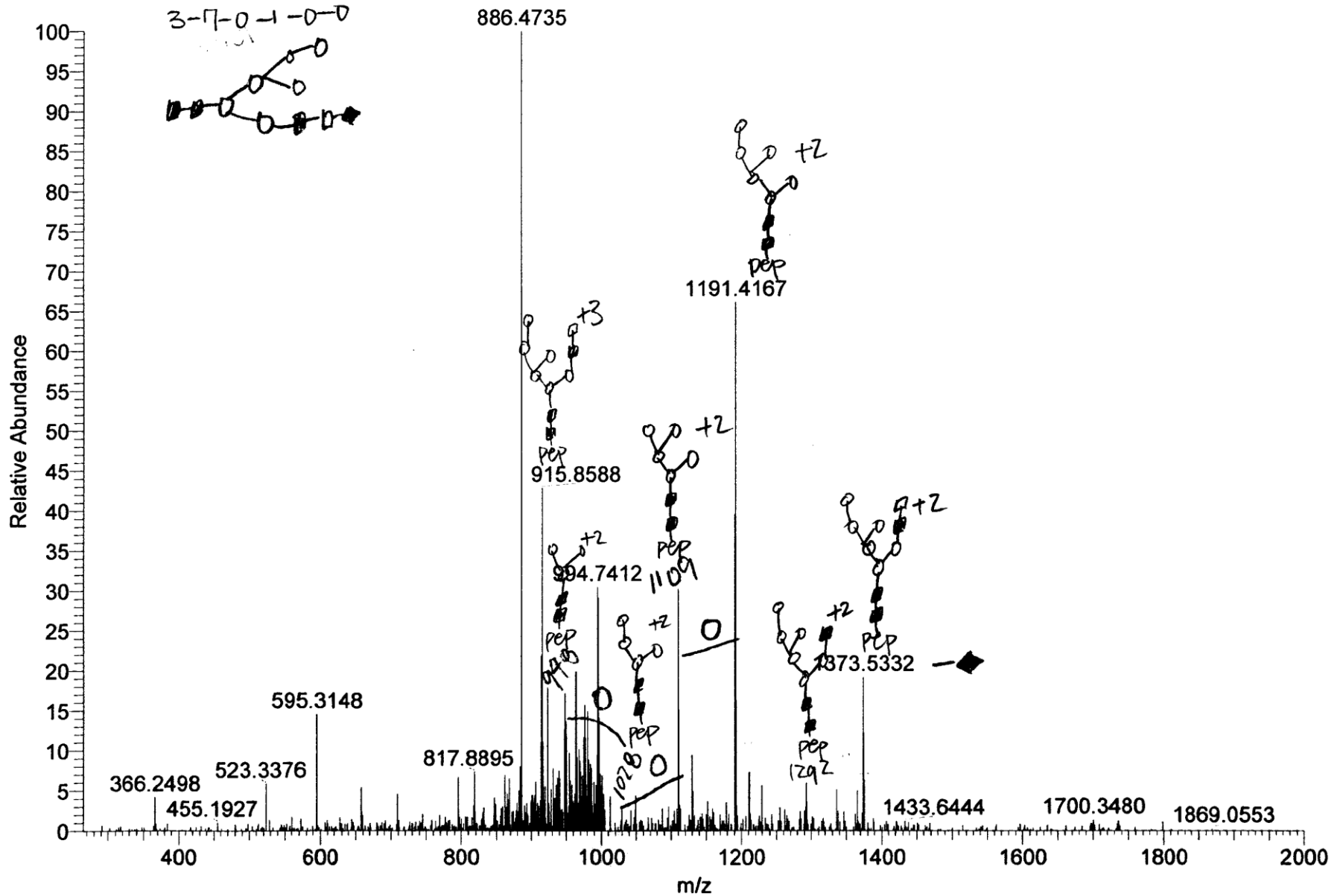


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7/13/2017 10:35:40 AM

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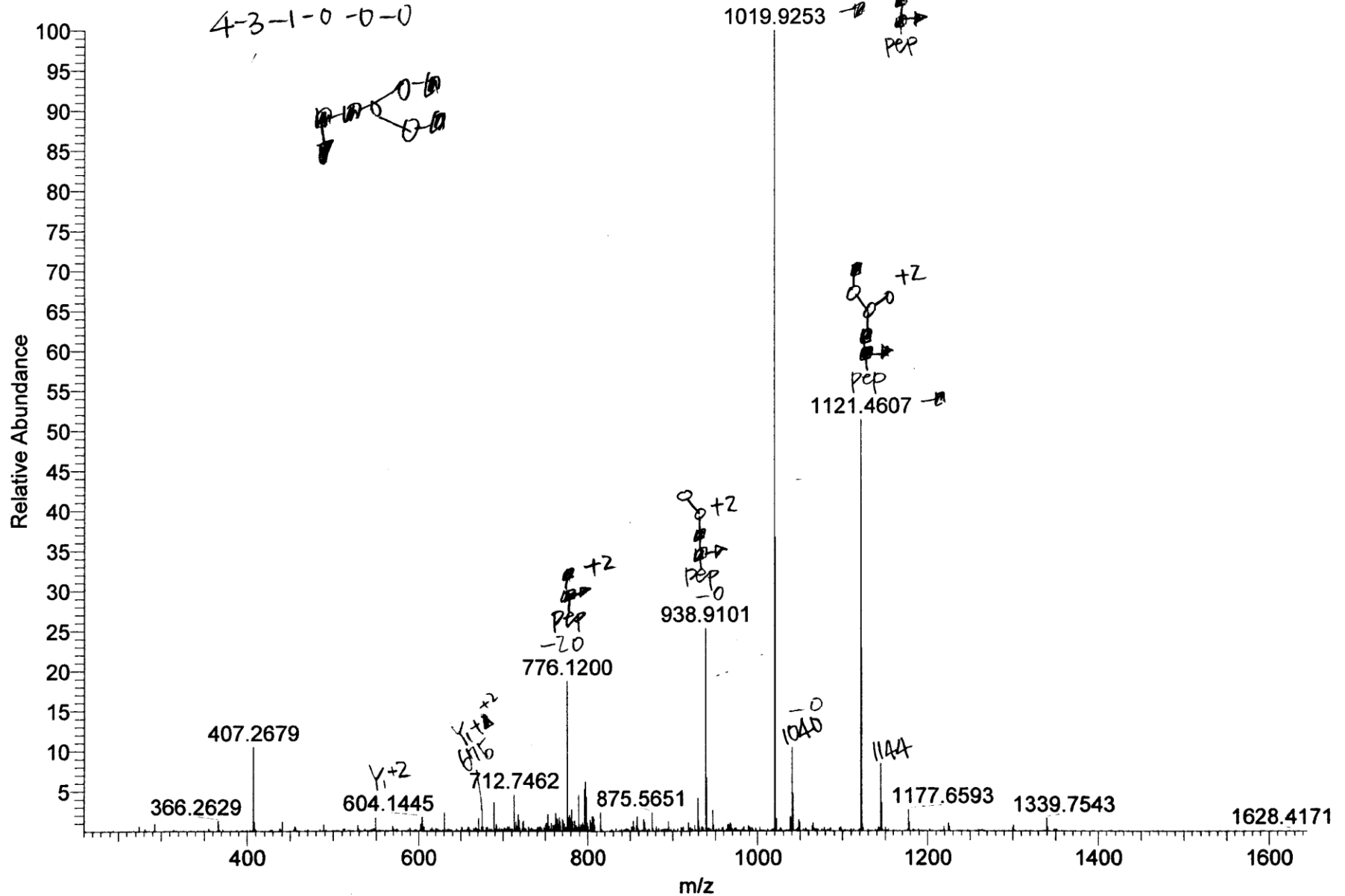


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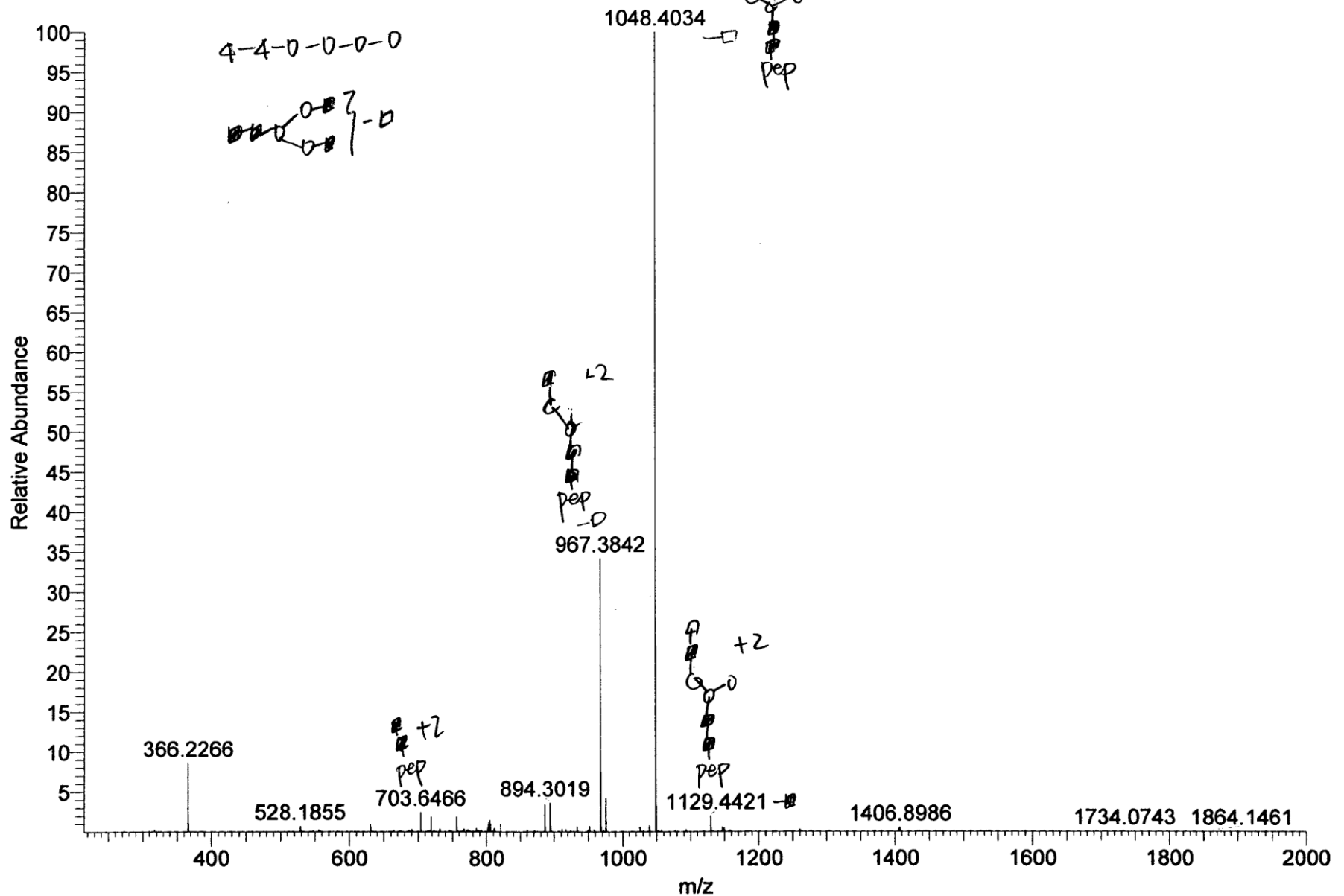
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7/13/2017 10:35:40 AM

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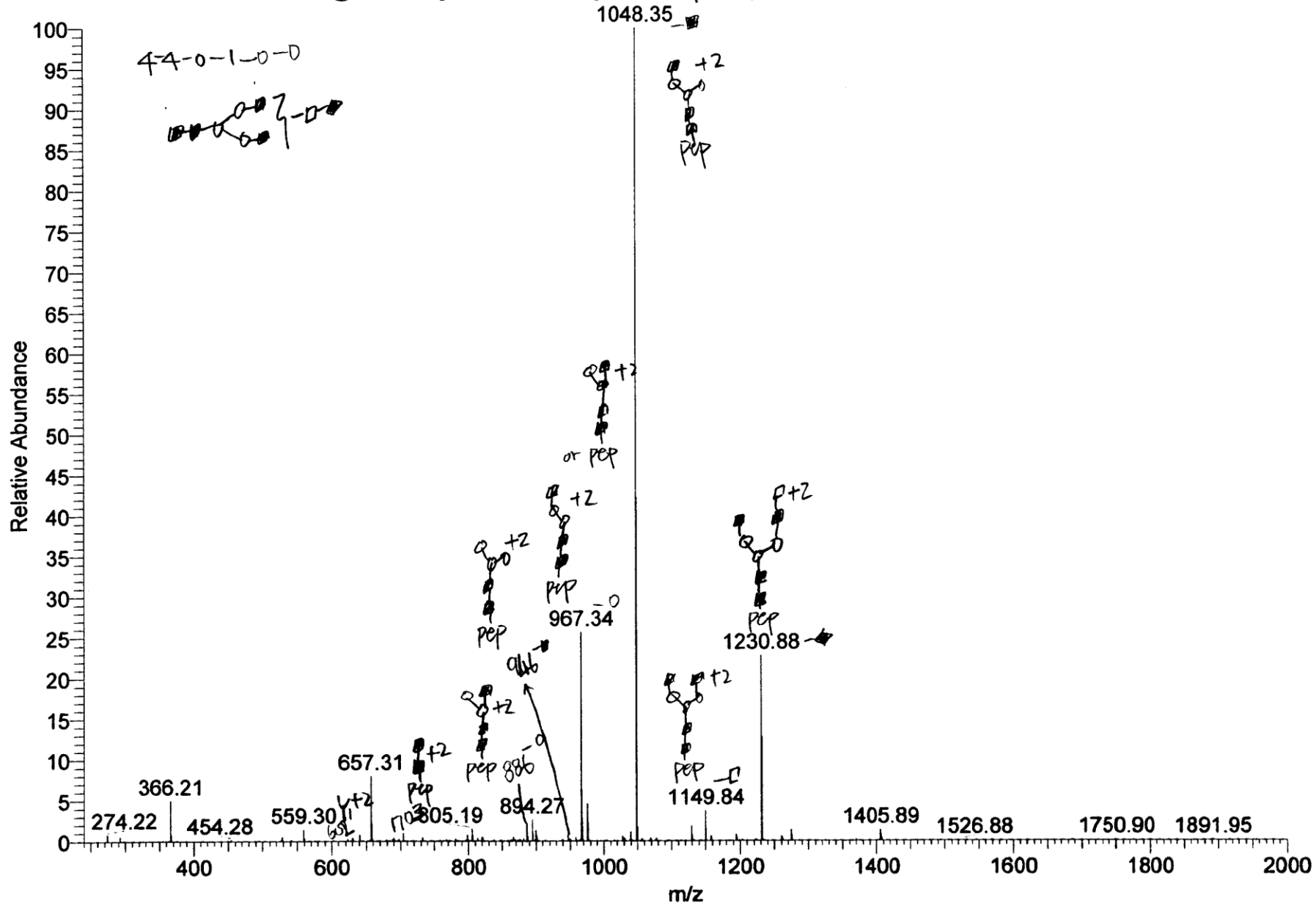
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6/30/2017 12:24:11 PM

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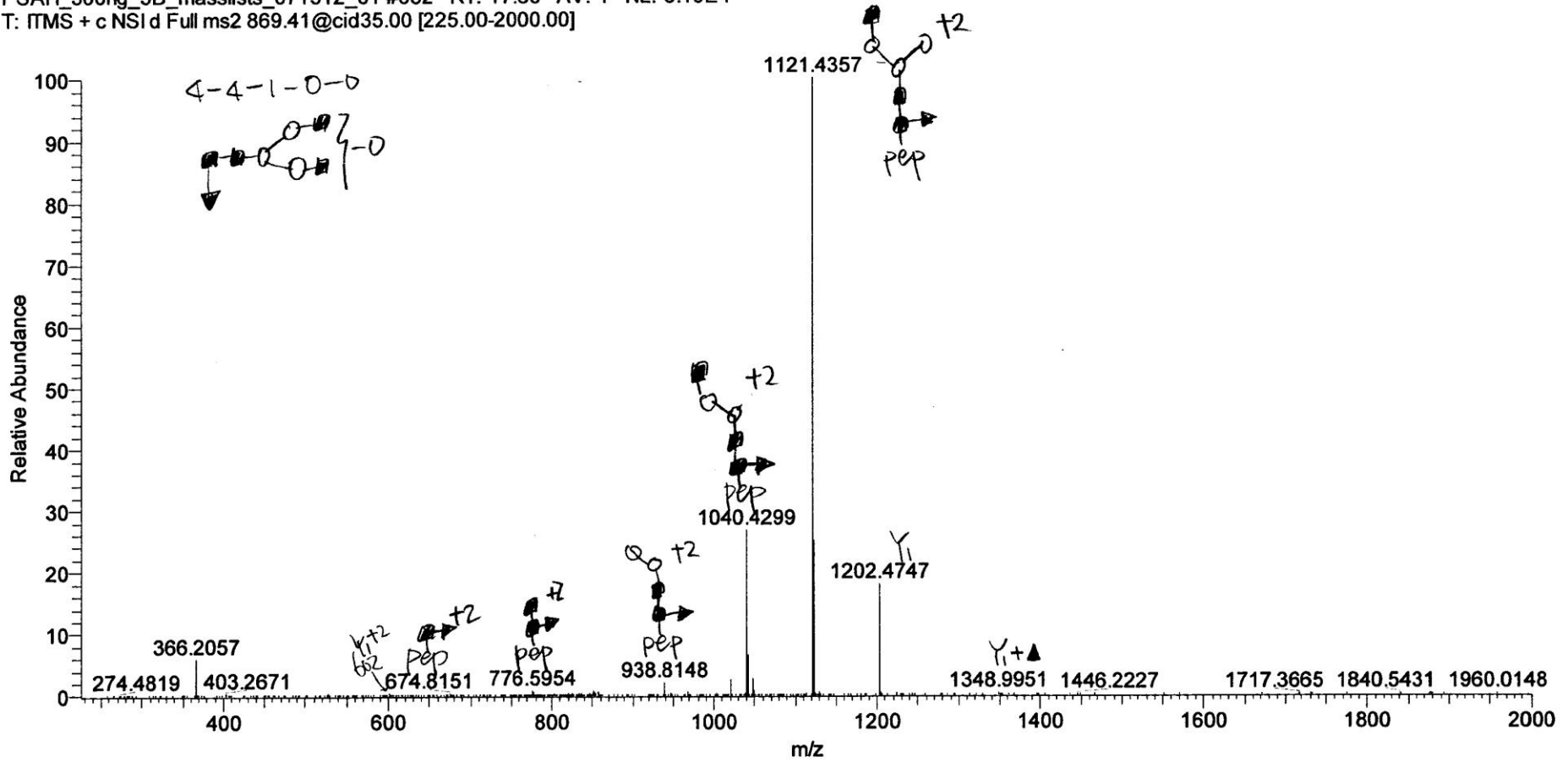
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13.917, 17631, 12750.268



HexNAc4Hex4dHex1

PSAH_300ng_5B_masslists_071312_01 #552 RT: 17.63 AV: 1 NL: 5.19E4
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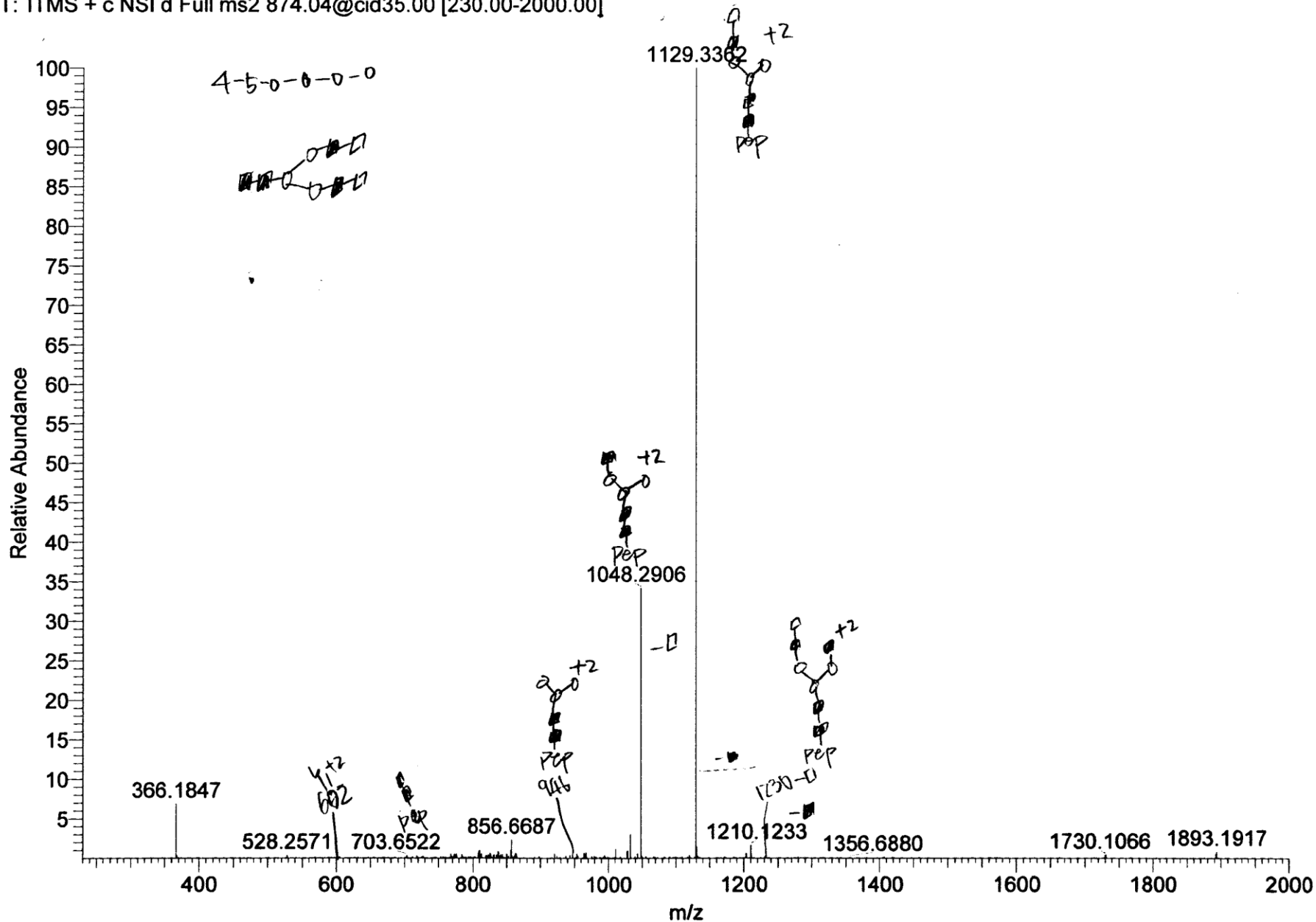


HexNAc4Hex5

7/13/2017 1:35:40 AM

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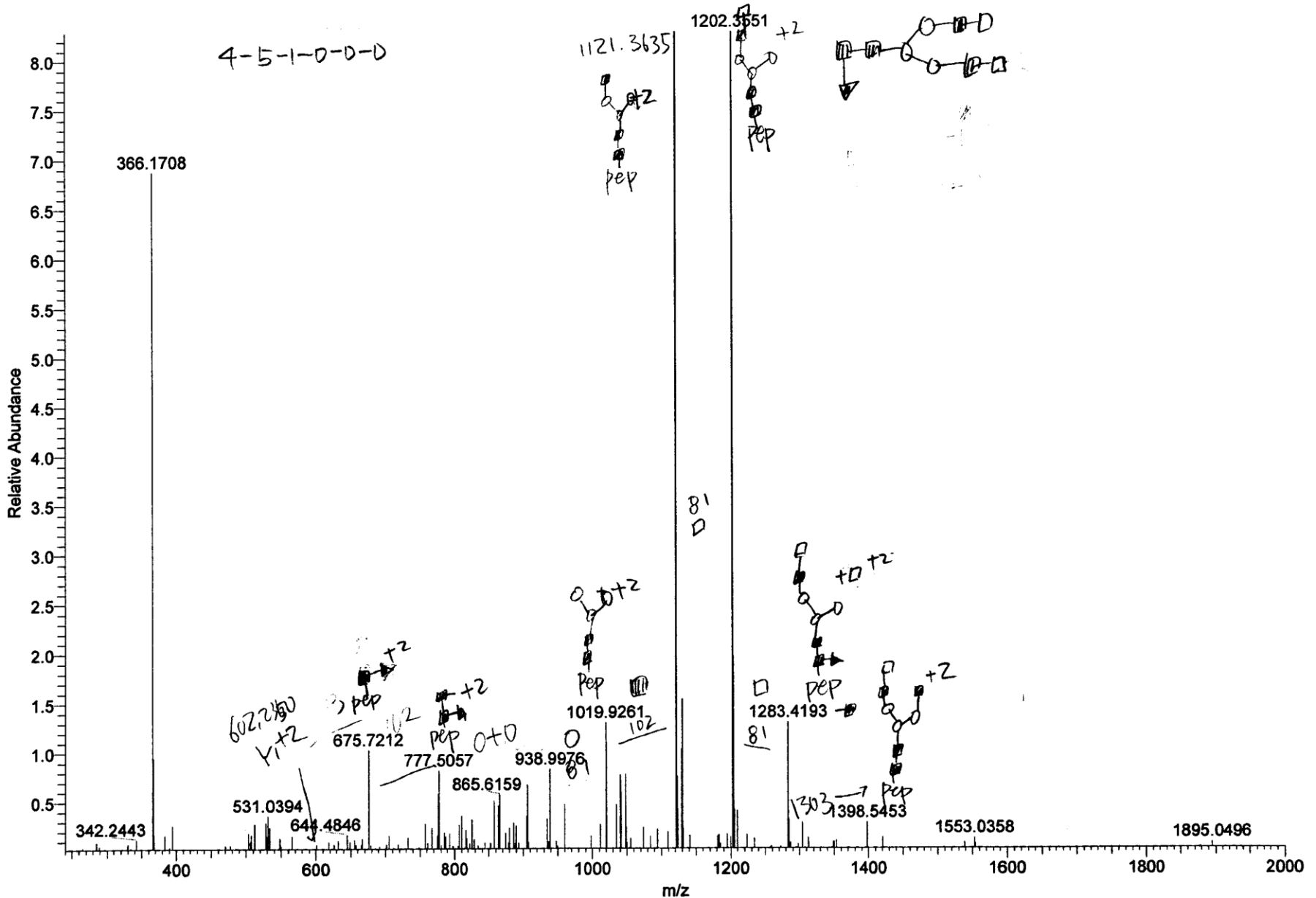


HexNAc4Hex5dHex1

6/19/2012 8:16: M

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+3, 923.429 2769.259 NKS VILLGR



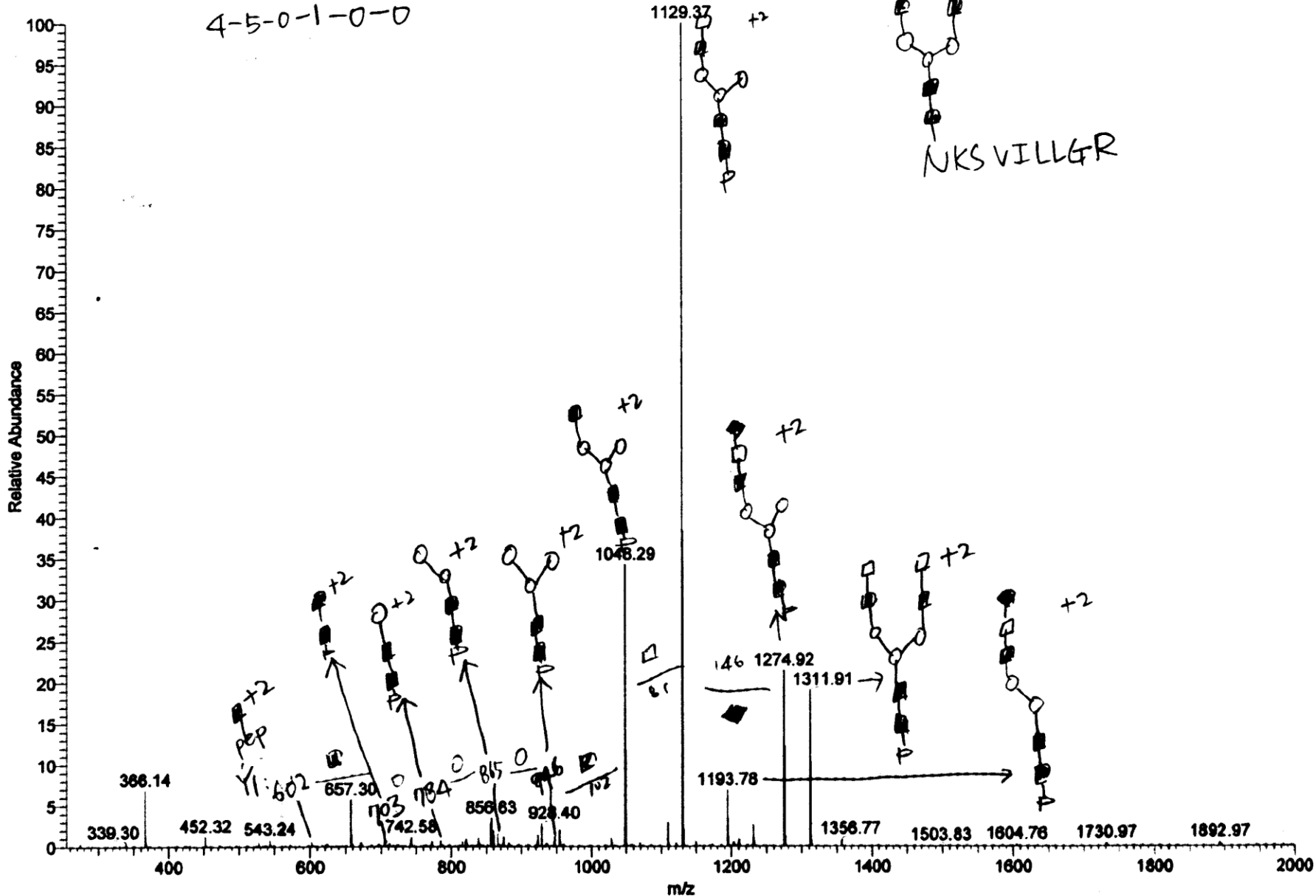
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+3, 991.7961, 2912.309

4-5-0-1-0-0

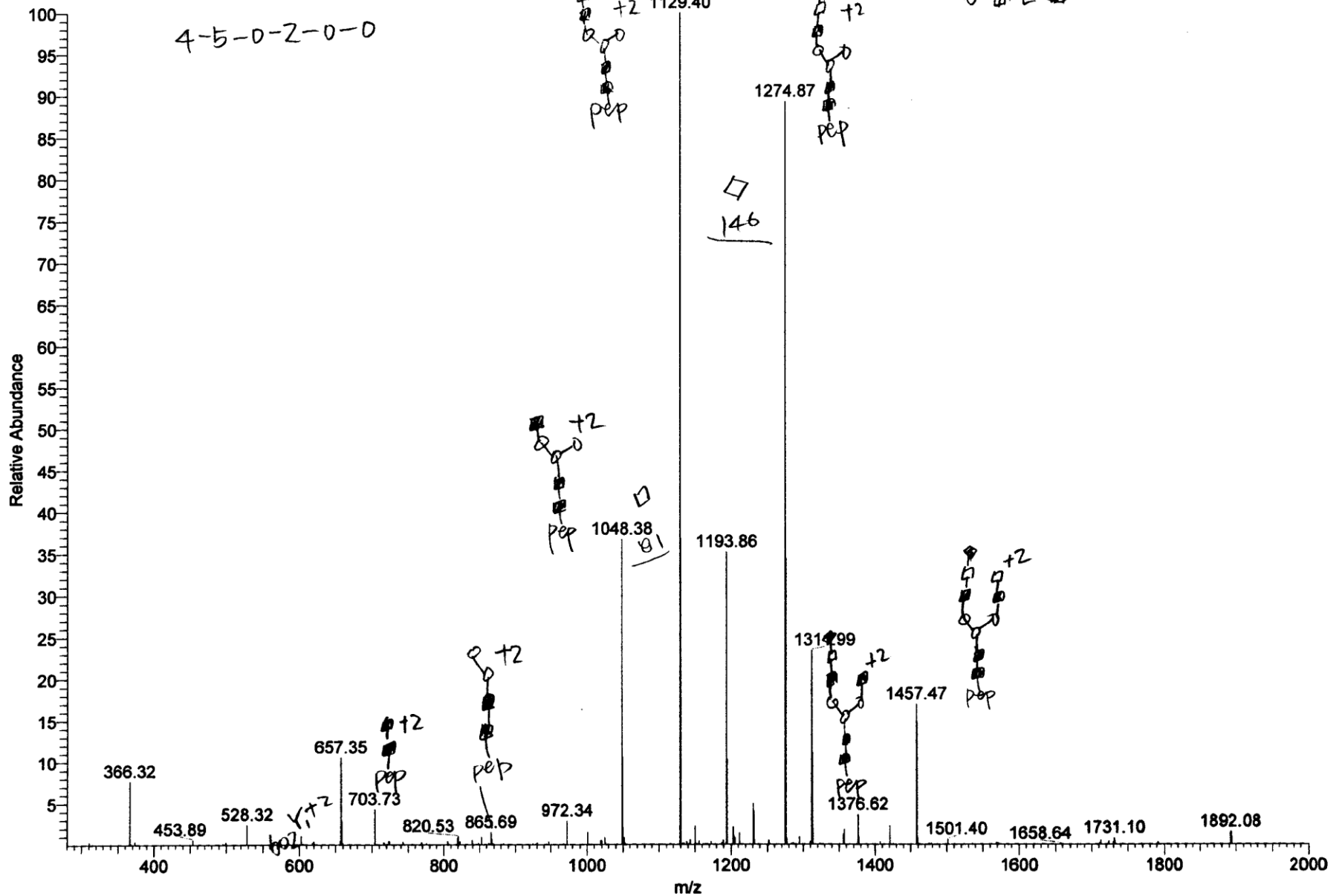


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6/19/2012 8:16: M

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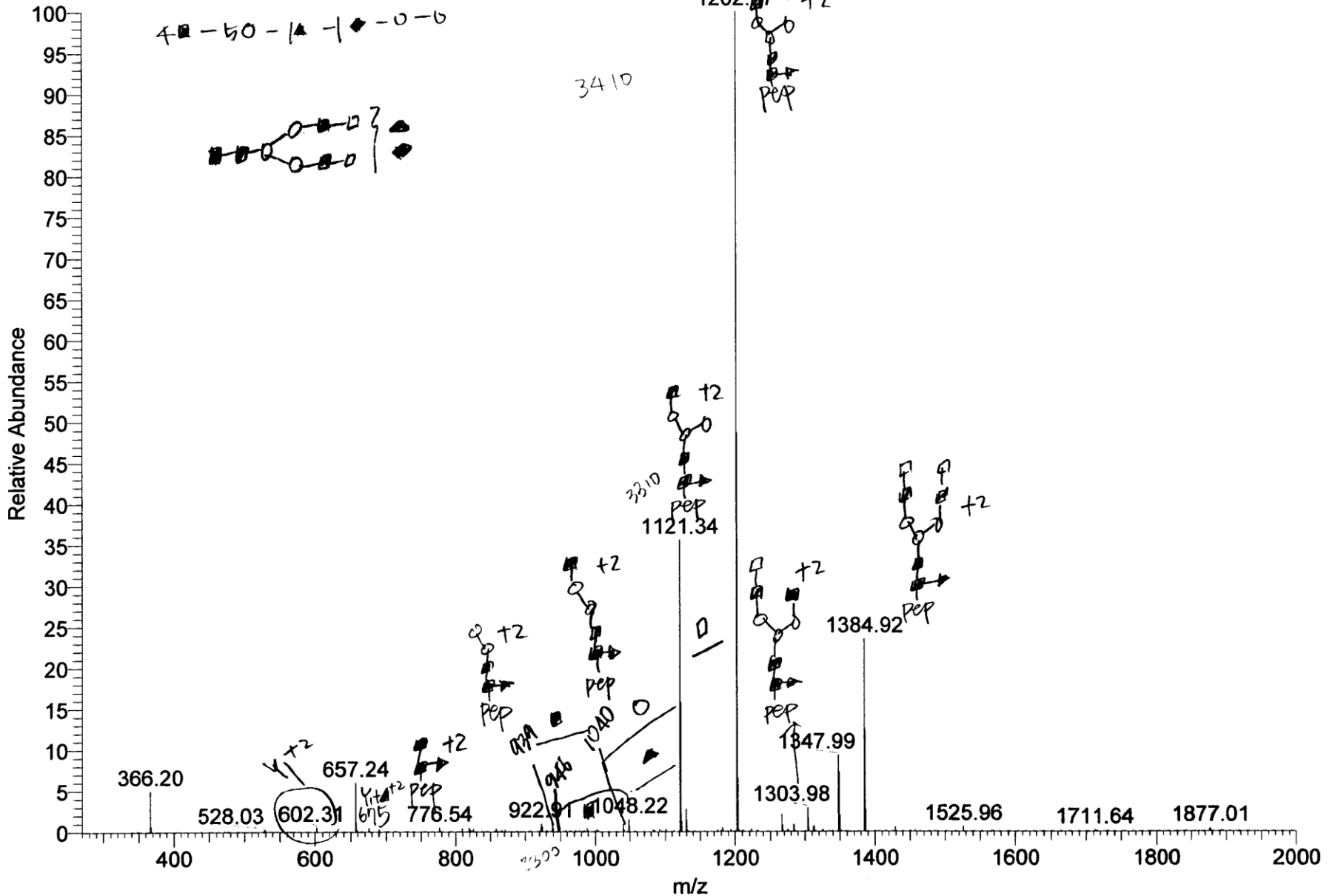
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6/30/2017 12:24:11 PM

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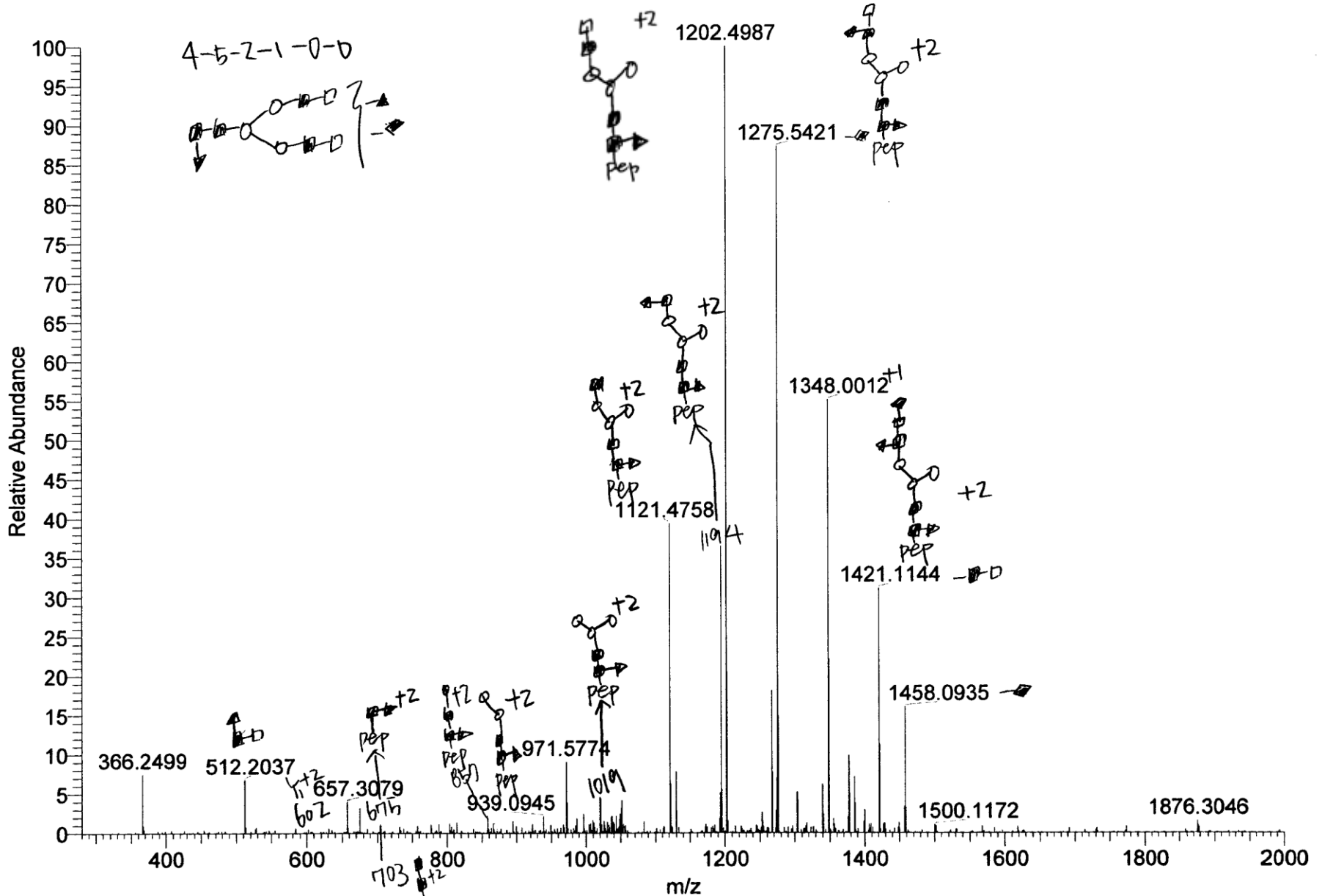
+3, 1020.467, 3058.3775



HexNAc4Hex5dHex2NeuAc1

7/13/2017 10:35:40 AM

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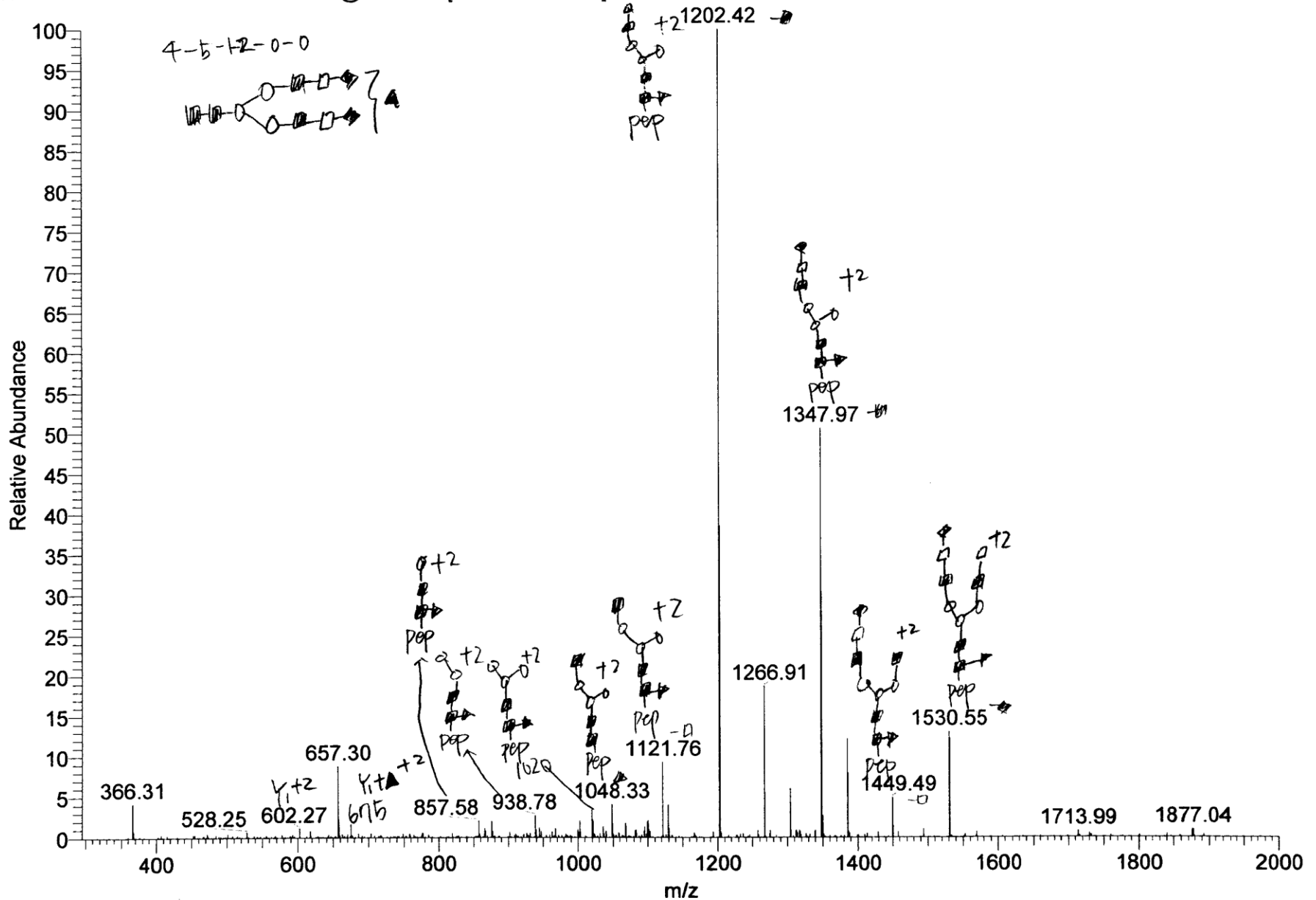


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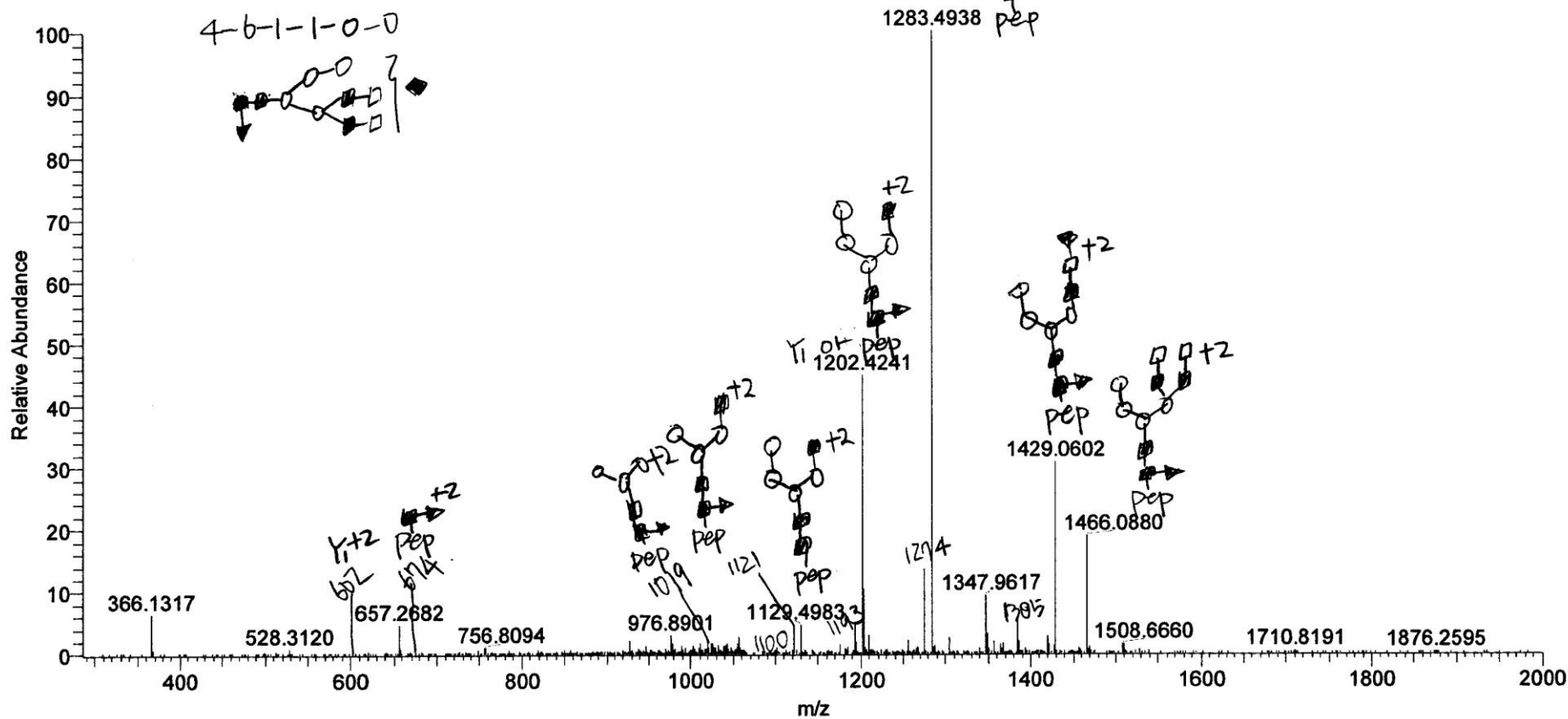
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+3, 1117.496, 3349.4645



HexNAc4Hex6dHex1NeuAc1

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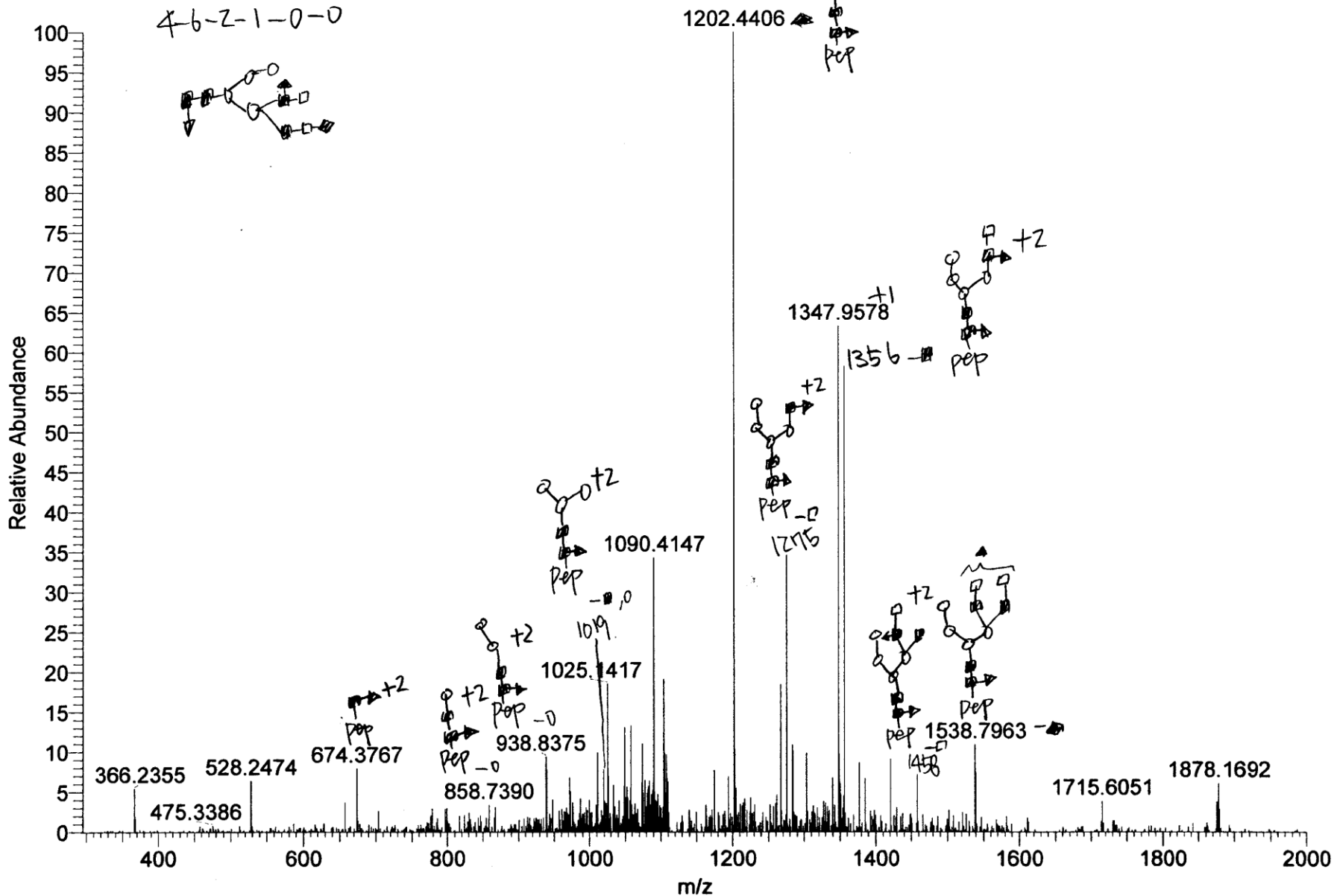


HexNAc4Hex6dHex2NeuAc1

7/13/2017 10:35:40 AM

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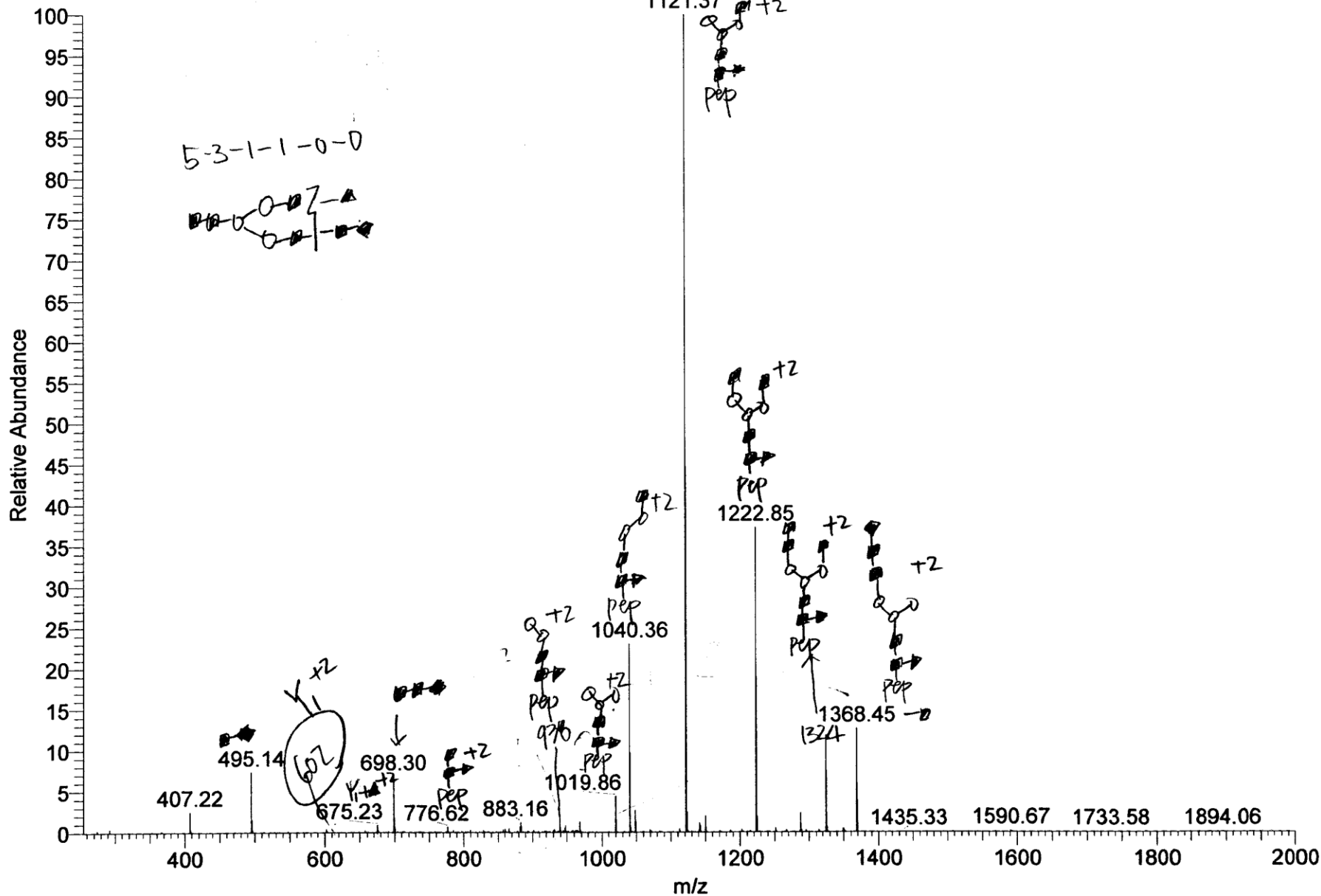
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6/30/2017 12:24:11 PM

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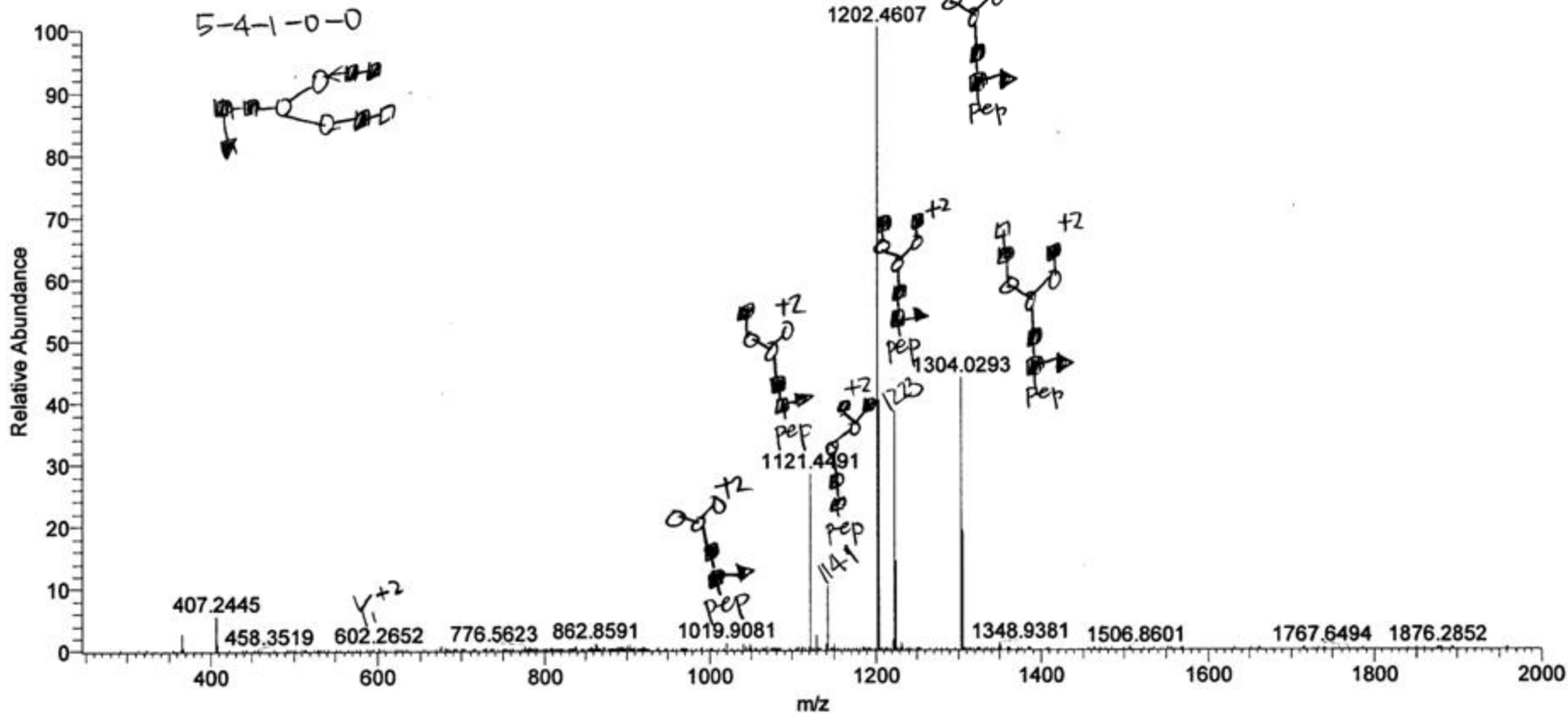
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+7, 980, 1267, 2977, 3576



HexNAc5Hex4dHex1

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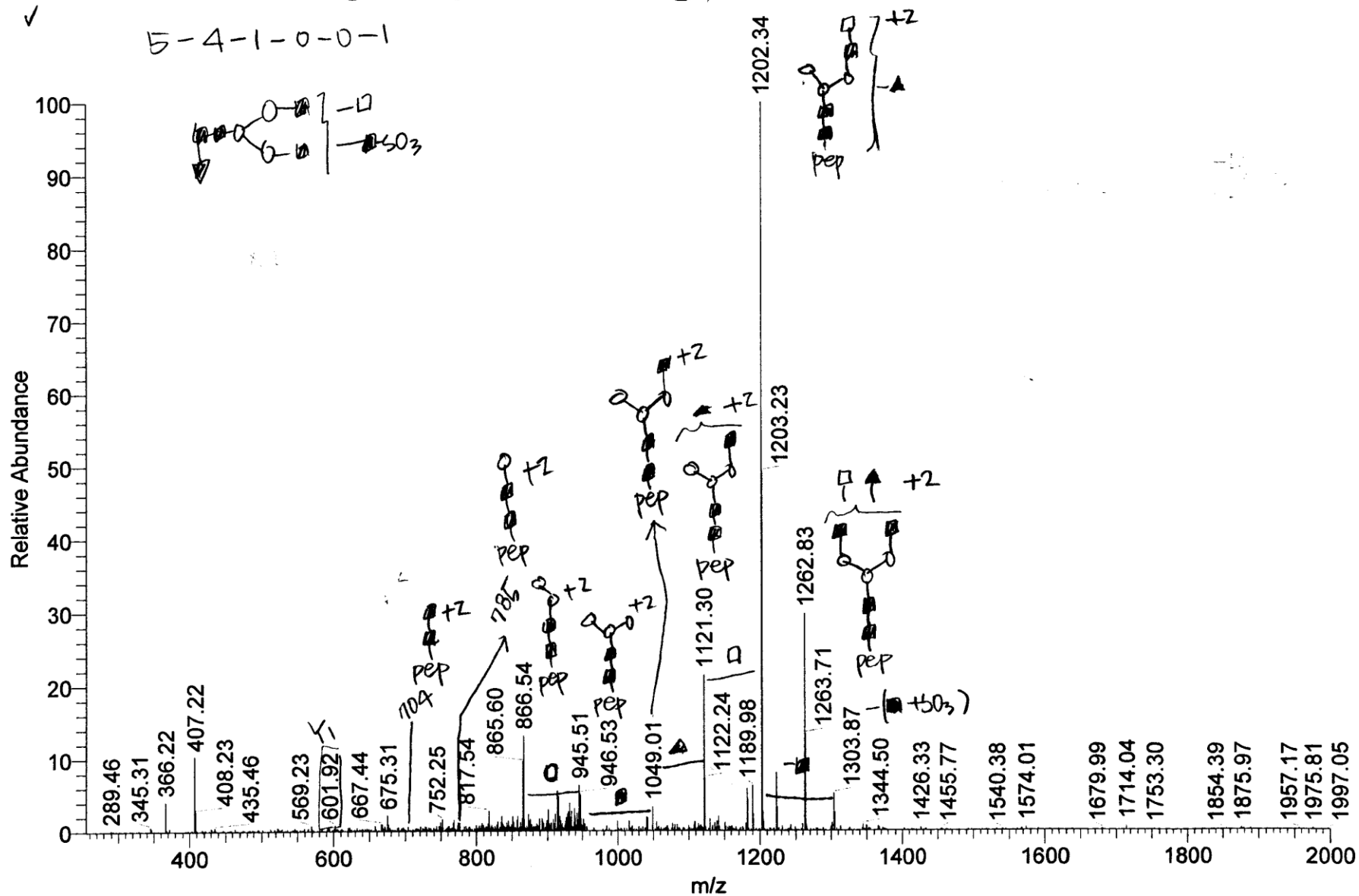


HexNAc5Hex4dHex1s/p1

6/30/2011 24:11 PM

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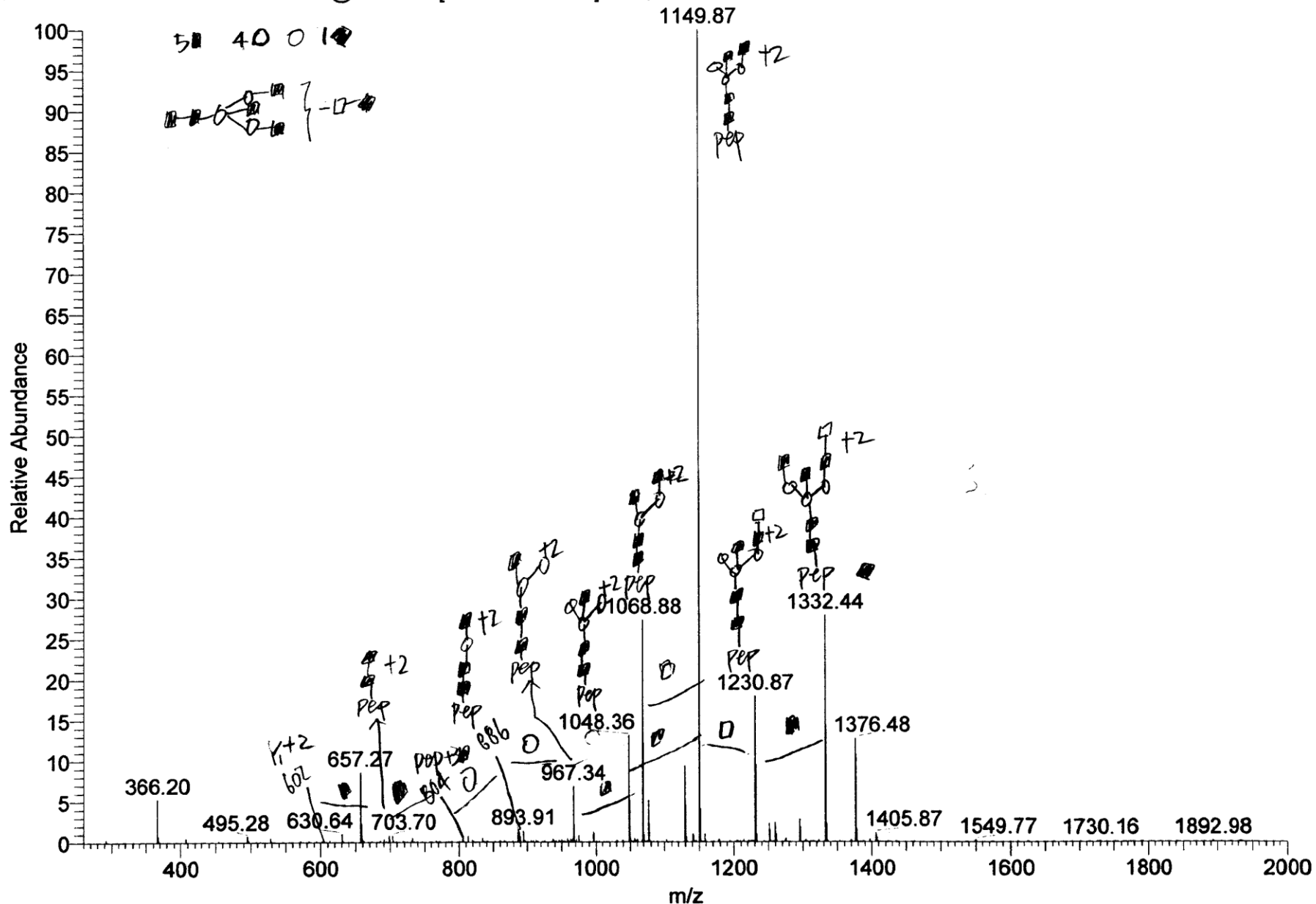


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6/30/2017 24:11 PM

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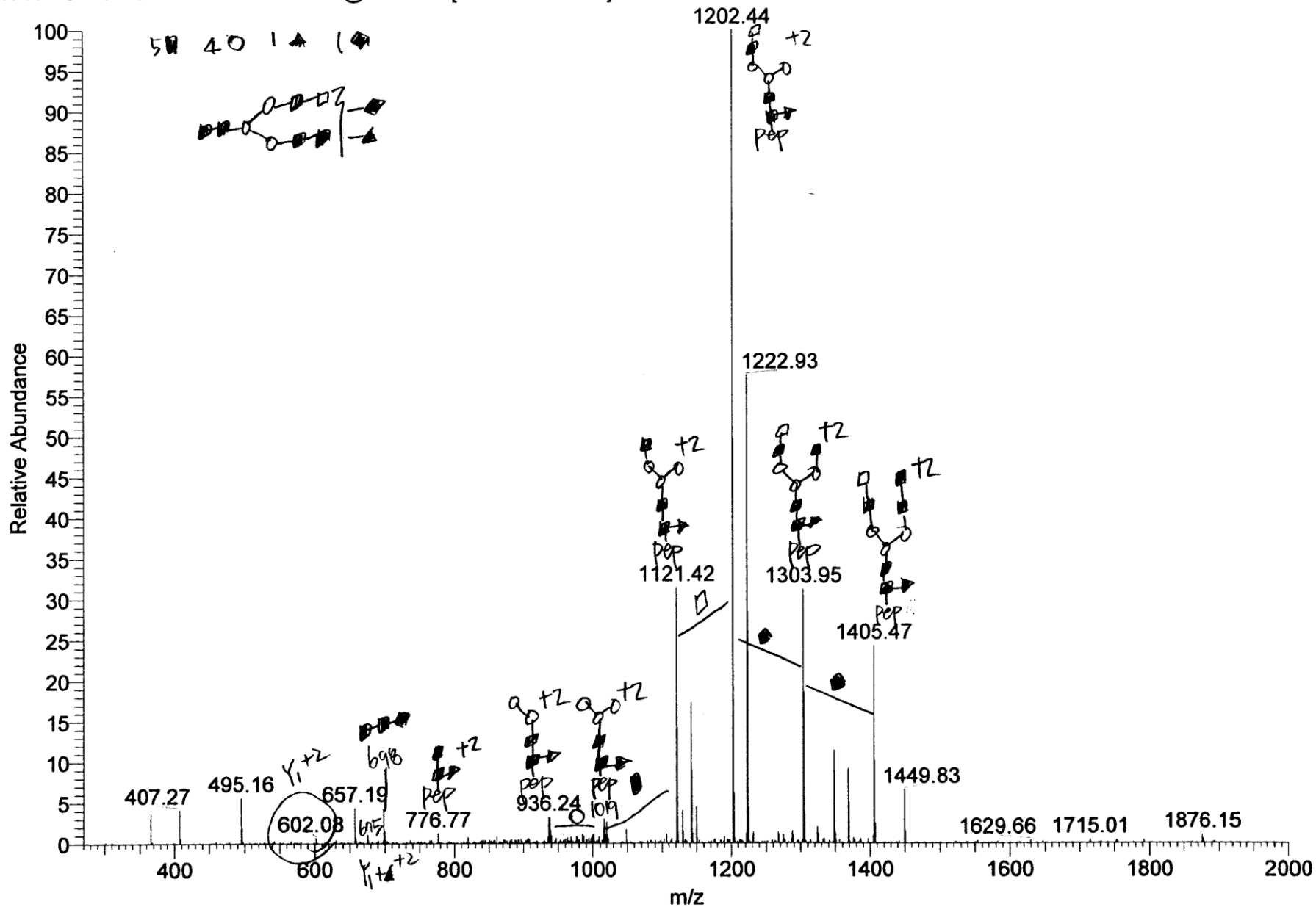


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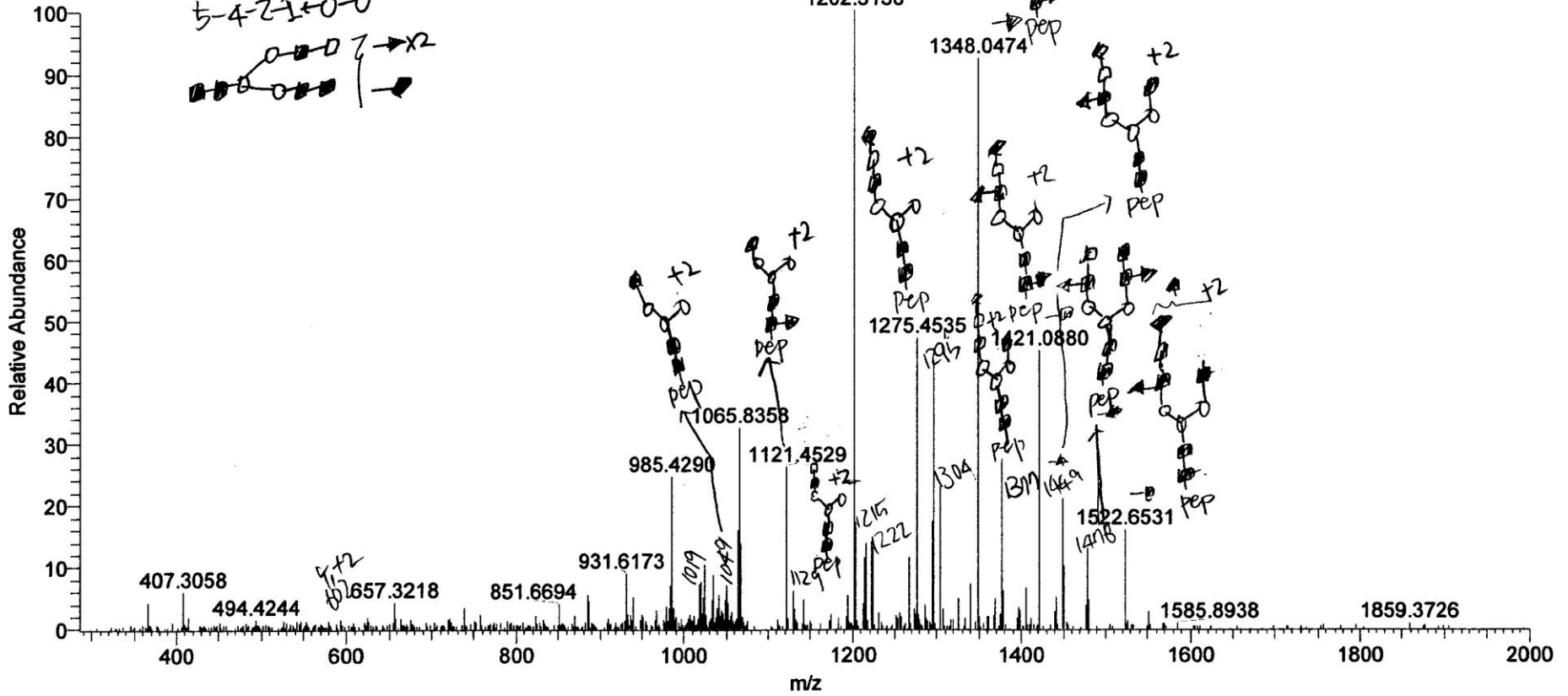
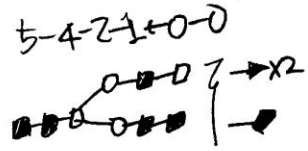
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+3. 1034.143. 3099.488



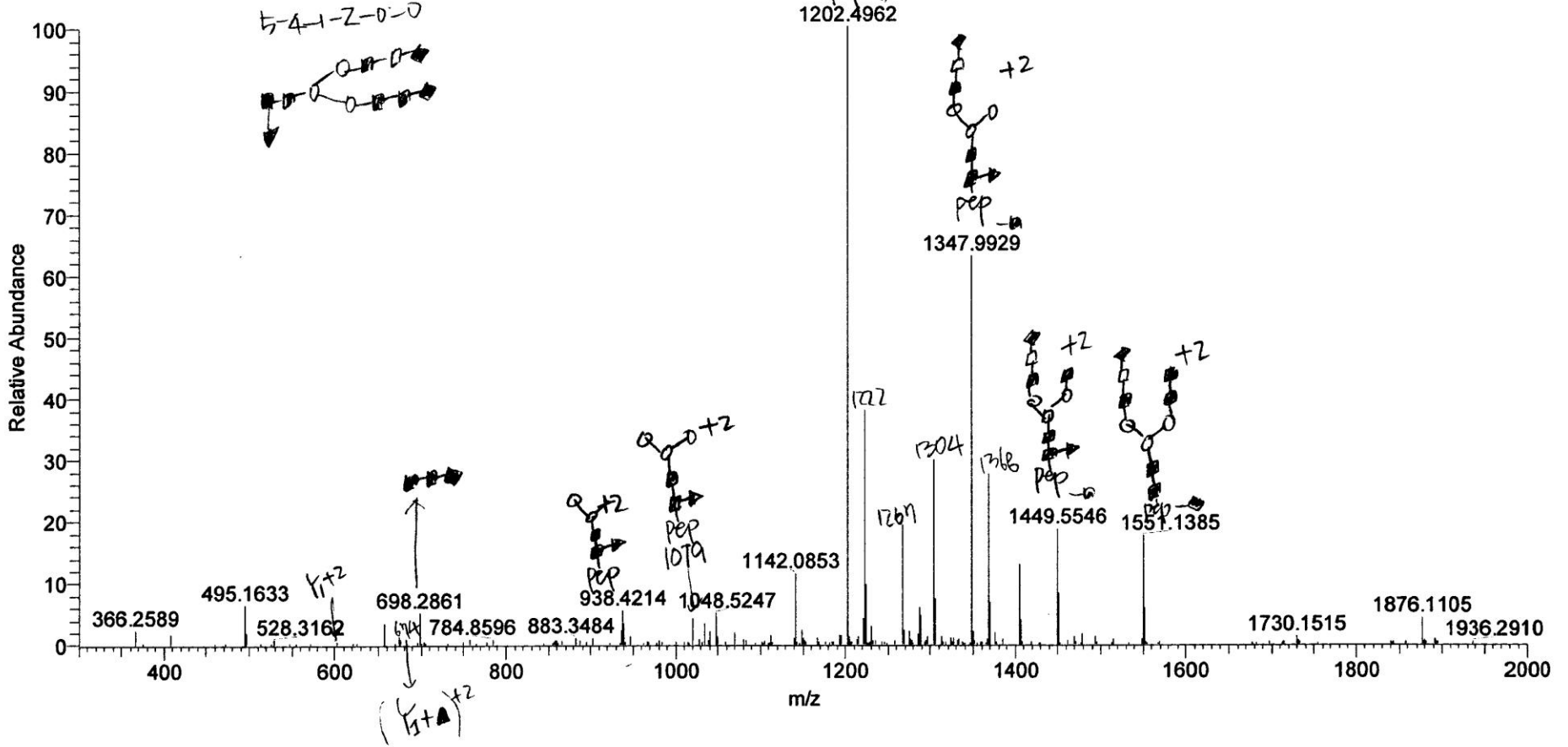
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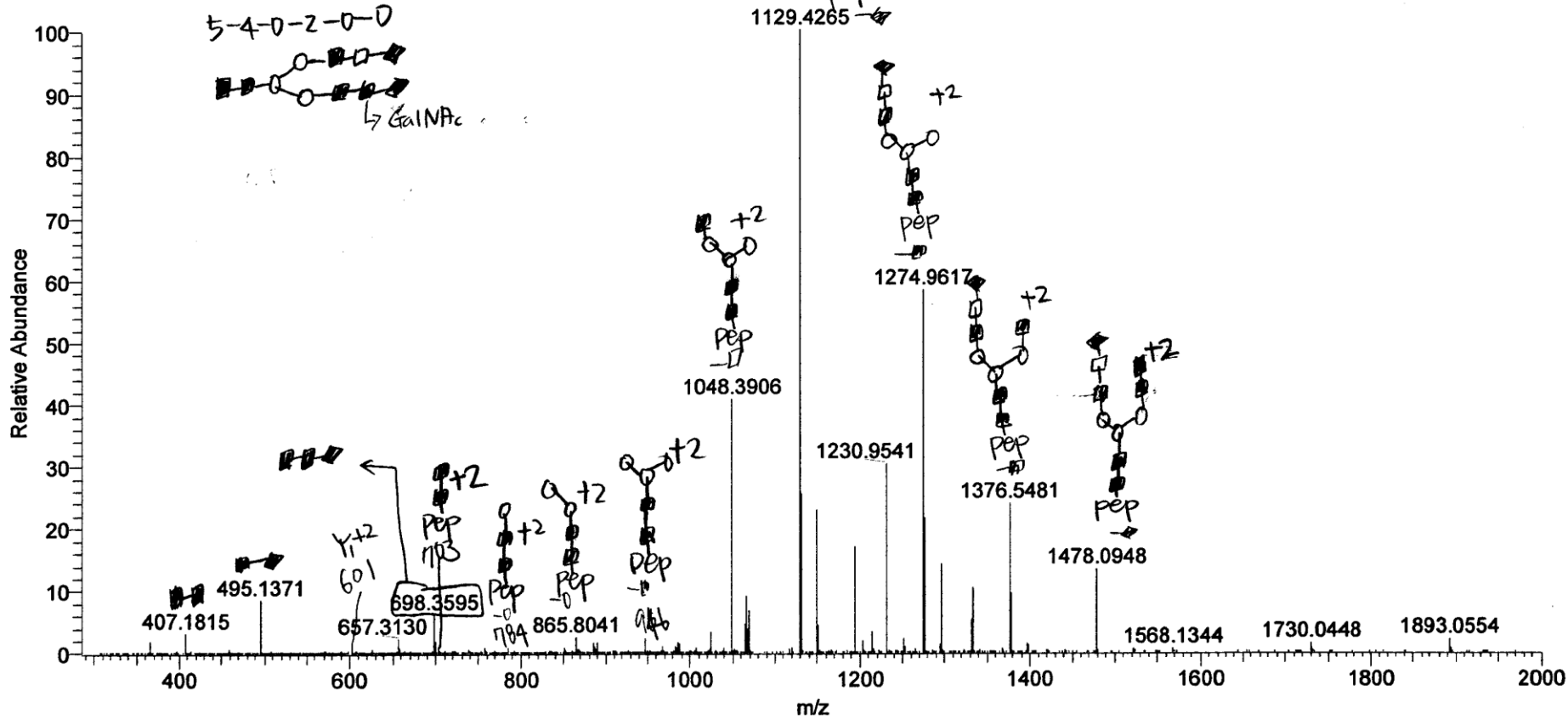
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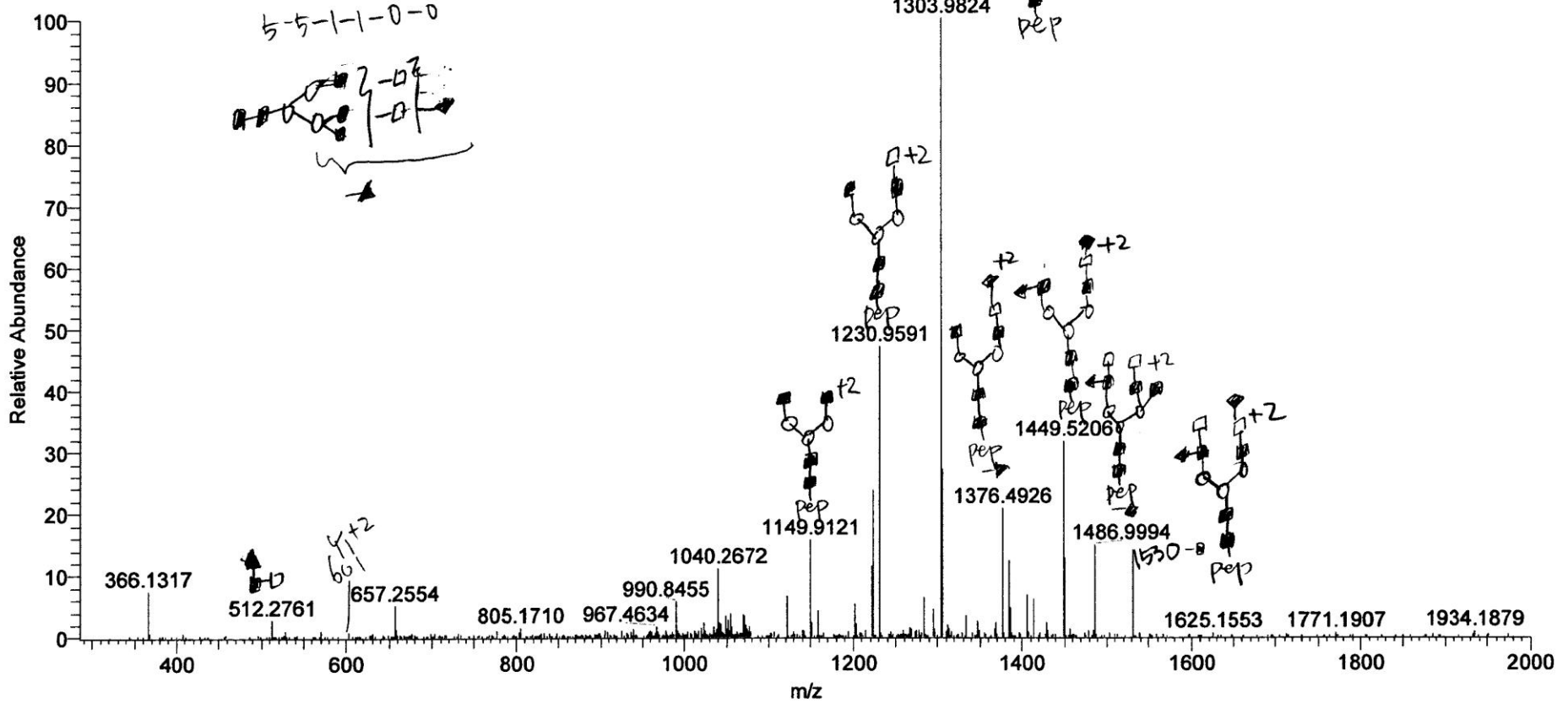
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PSAH_300ng_5B_masslists_071312_01 #1005 RT: 21.76 AV: 1 NL: 2.79E4
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HexNAc5Hex5dHex1NeuAc1

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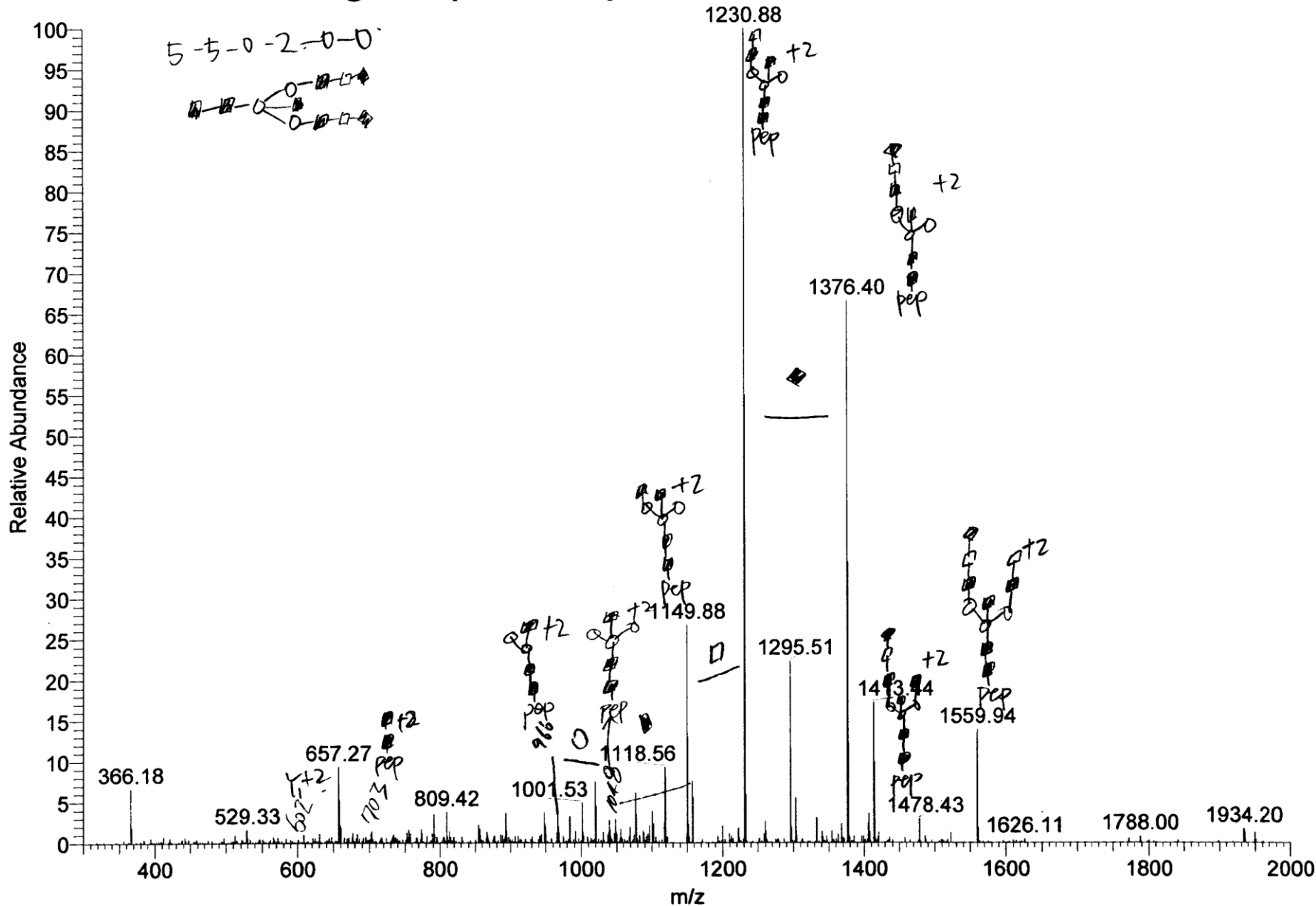


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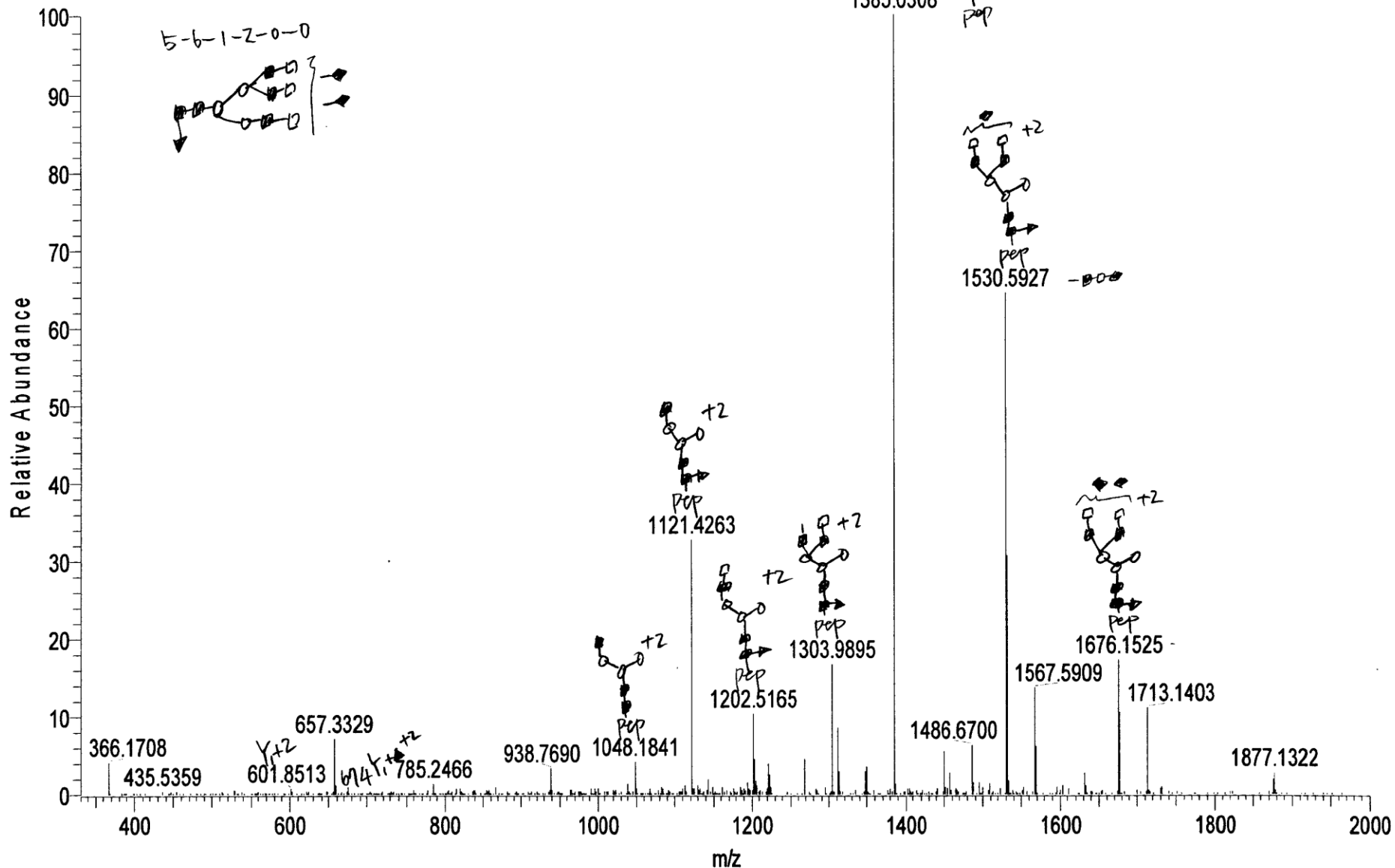
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HexNAc5Hex6dHex1NeuAc2

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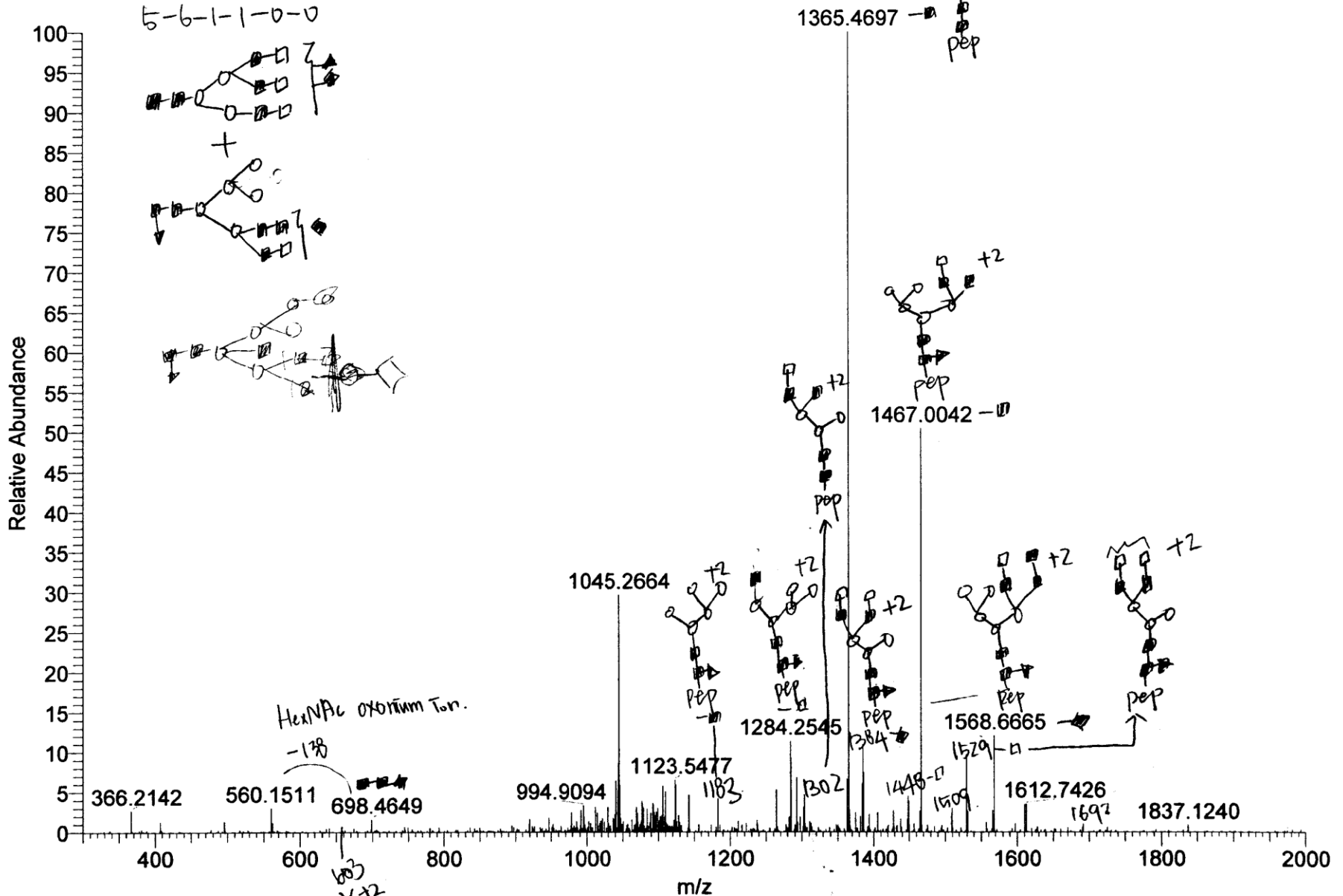


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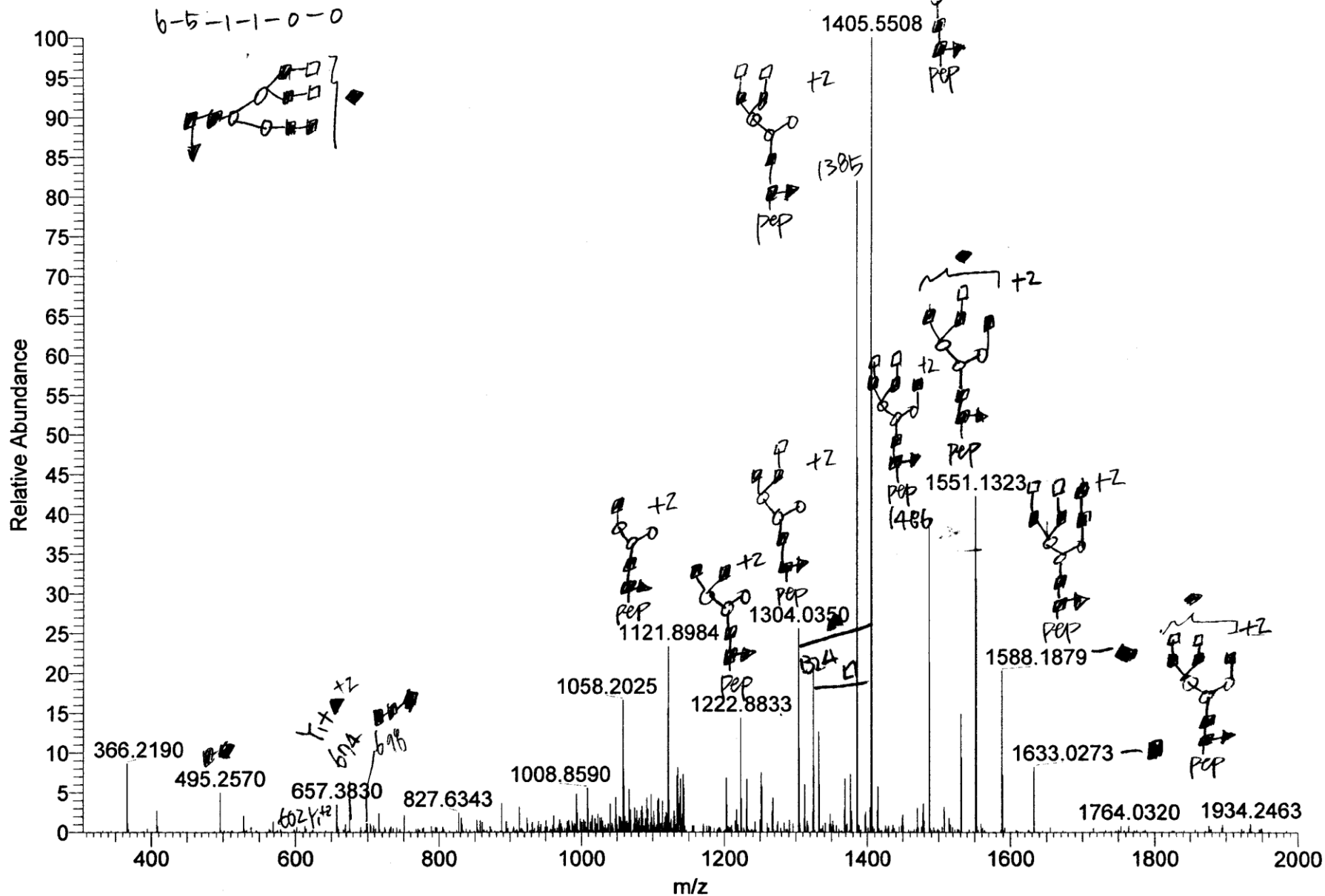


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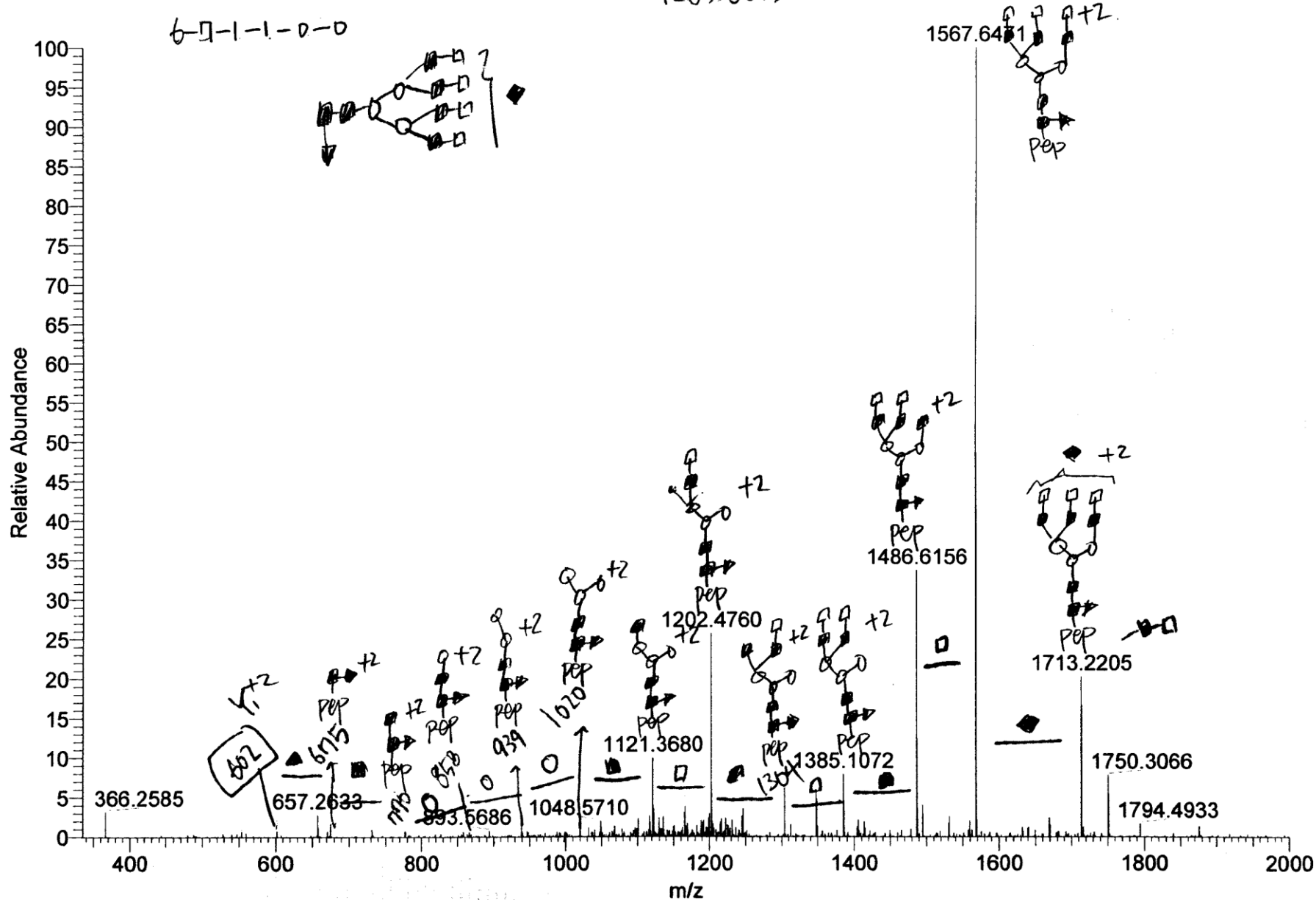
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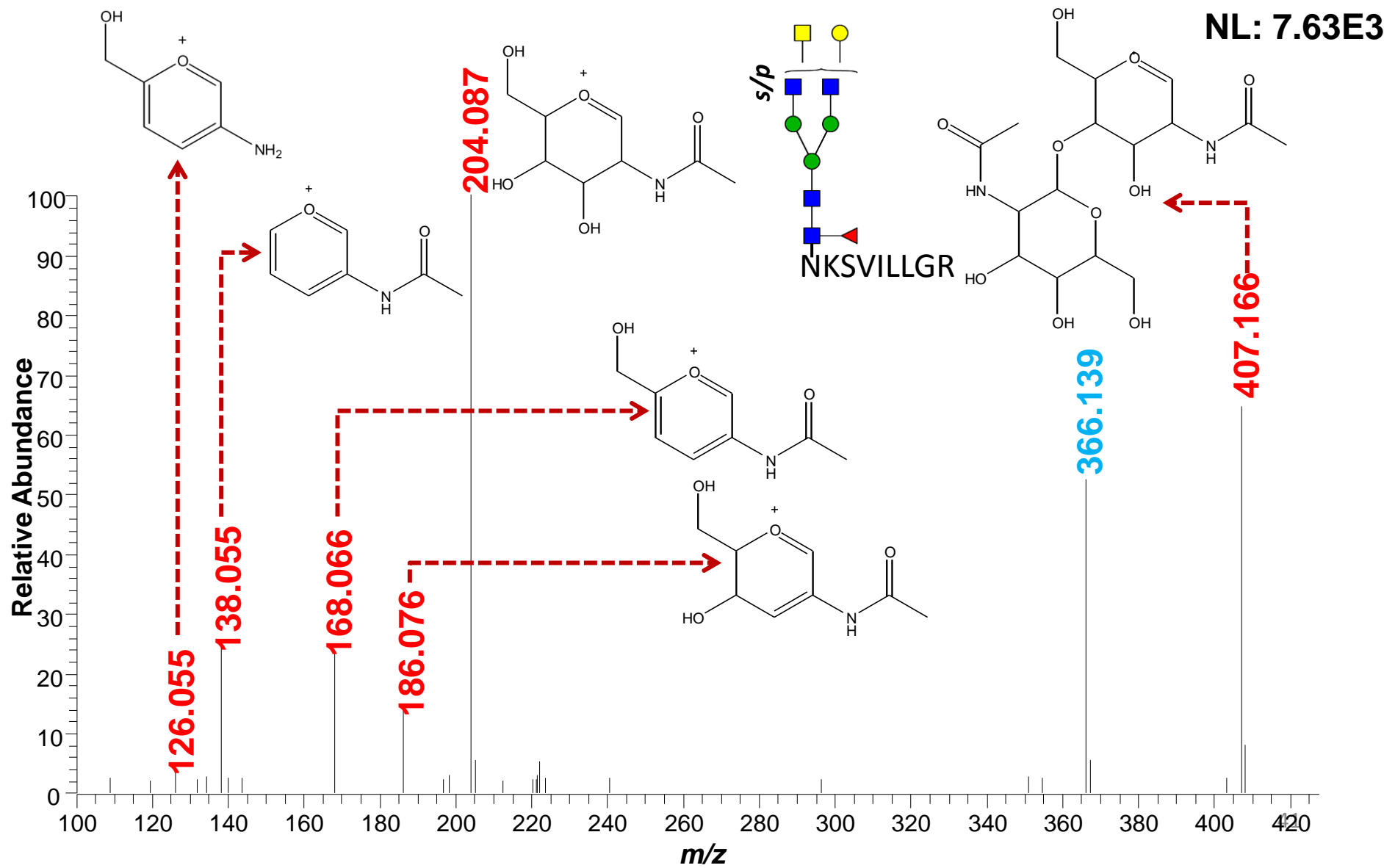
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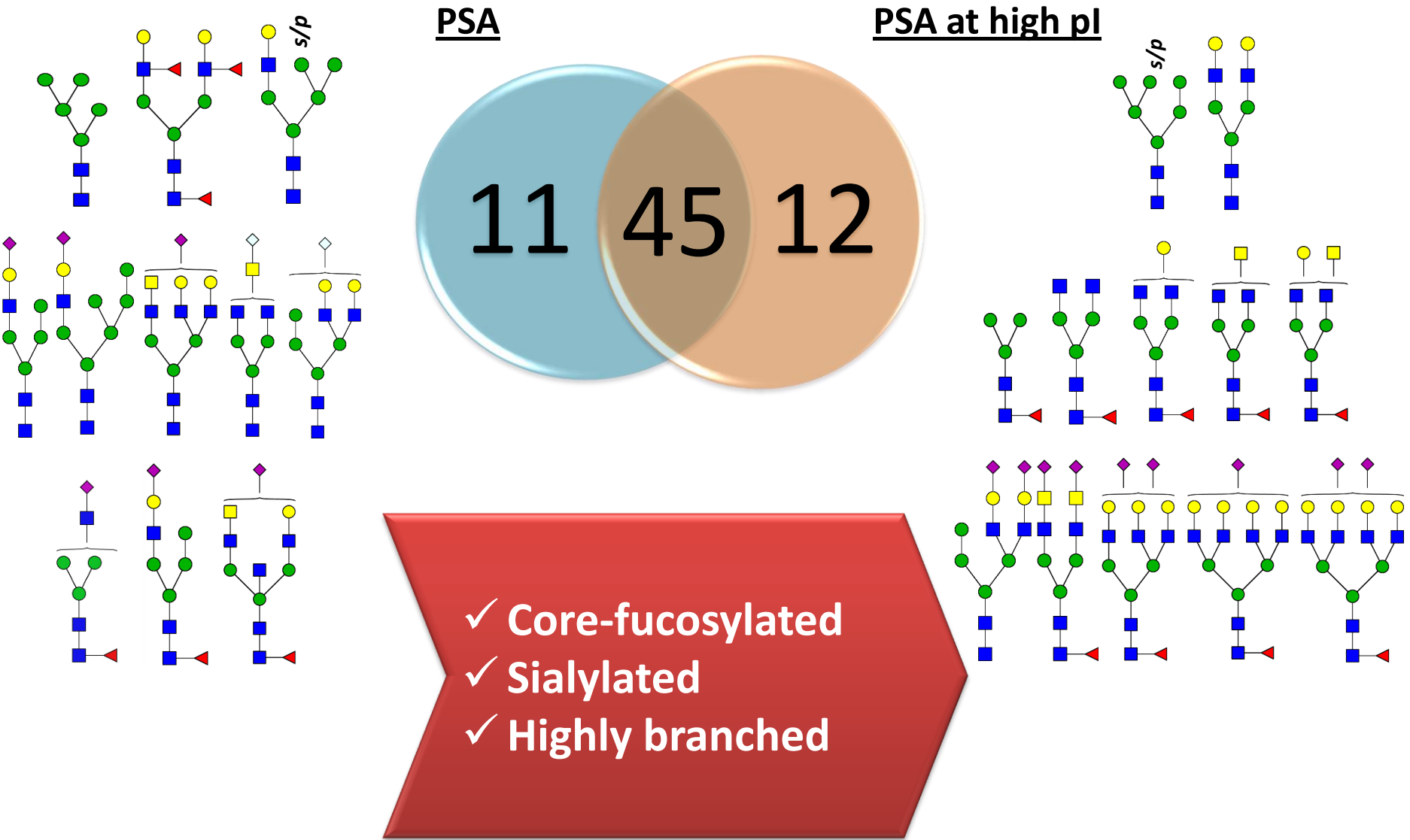
1263.8813 +3



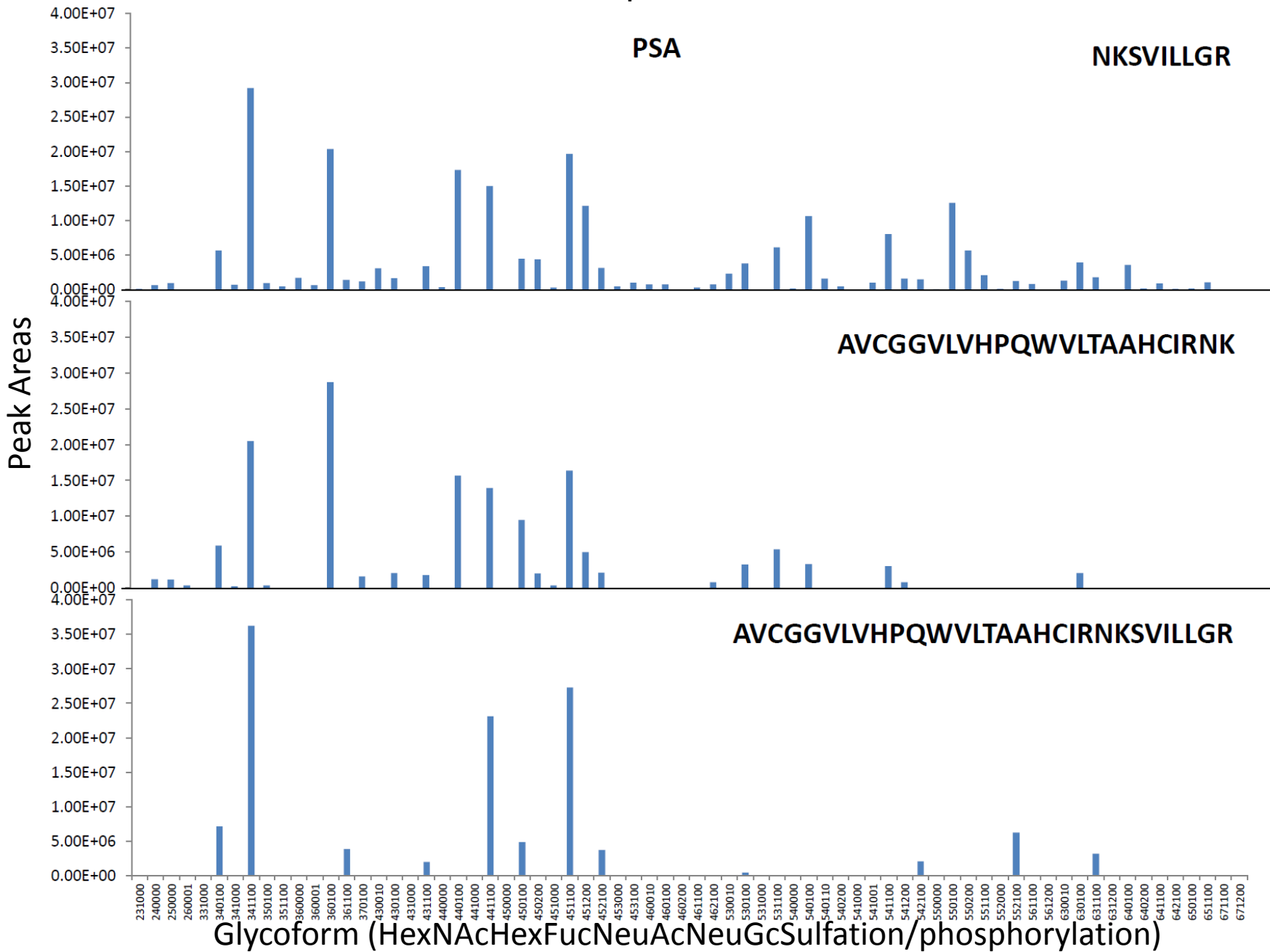
Supplementary Figure 2. HCD MS/MS of Sulfated/phosphorylated (*s/p*) Glycopeptide HexNAc5Hex4dHex1 *s/p*1. No diagnostic ions of sulfated/phosphorylated glycan residue was observed.



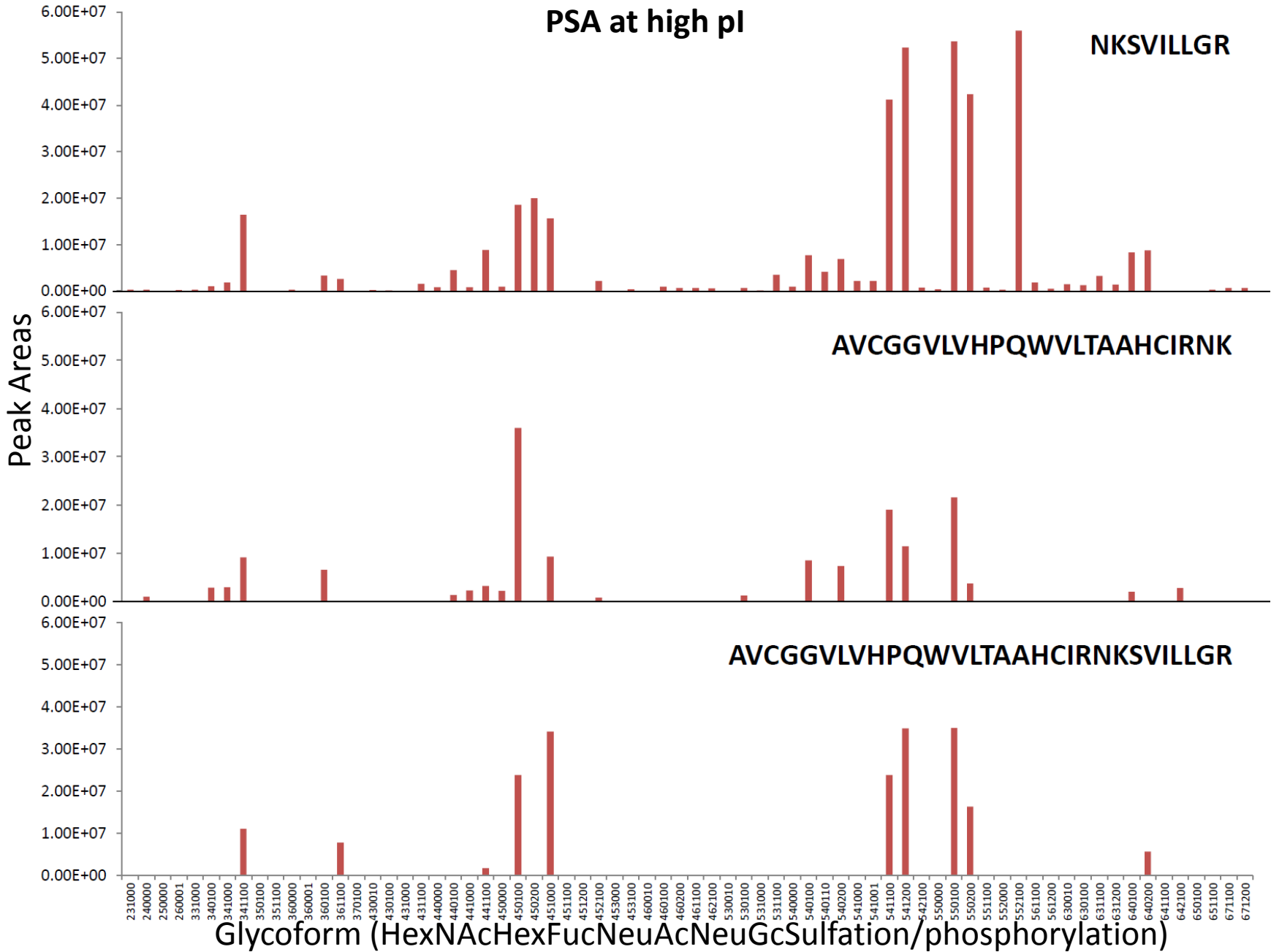
Supplementary Figure 3. Comparison of identified glycoforms between PSA and PSA at High pI



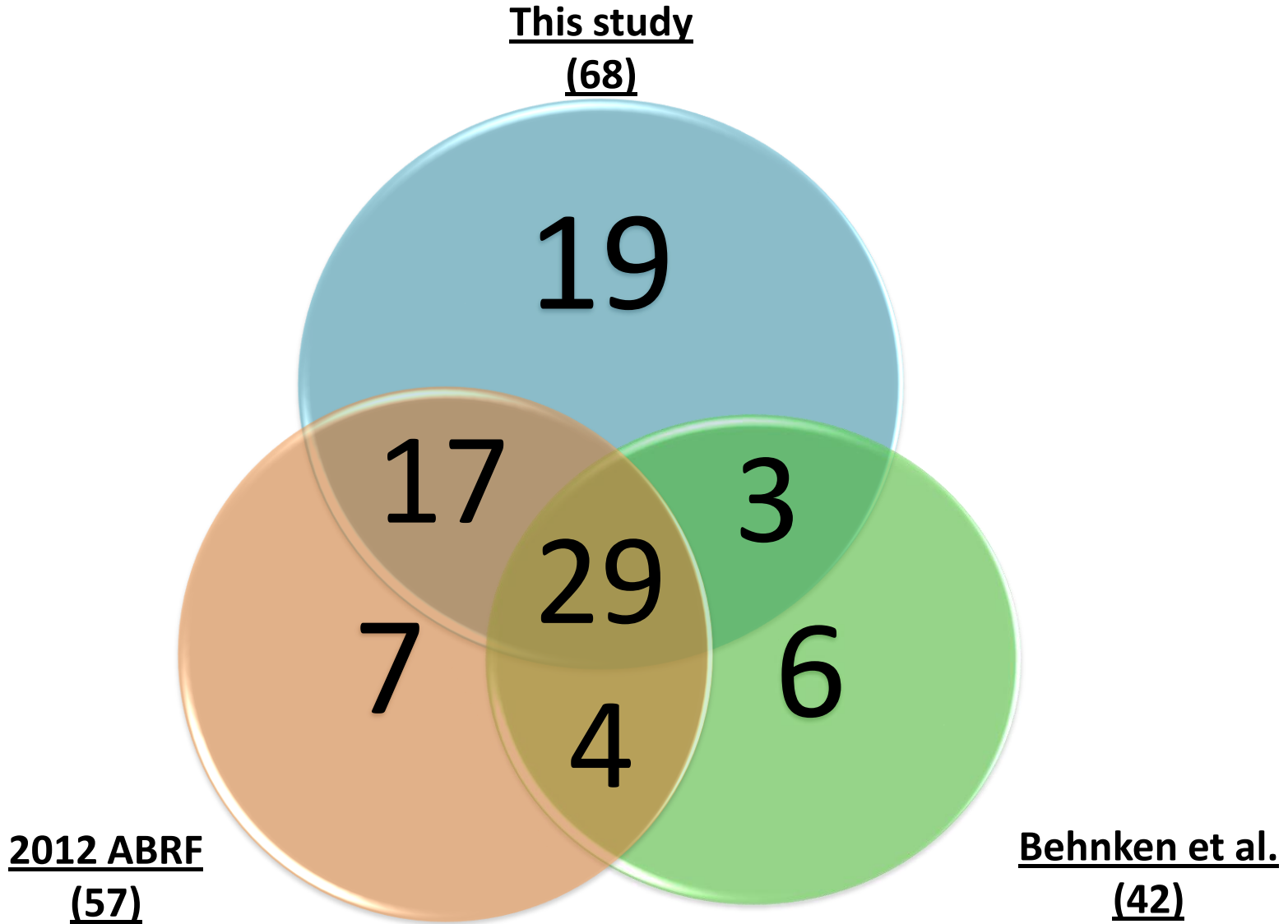
Supplementary Figure 4A. Peak areas of glycoforms associated with 3 peptide backbones identified from PSA at normal pl.



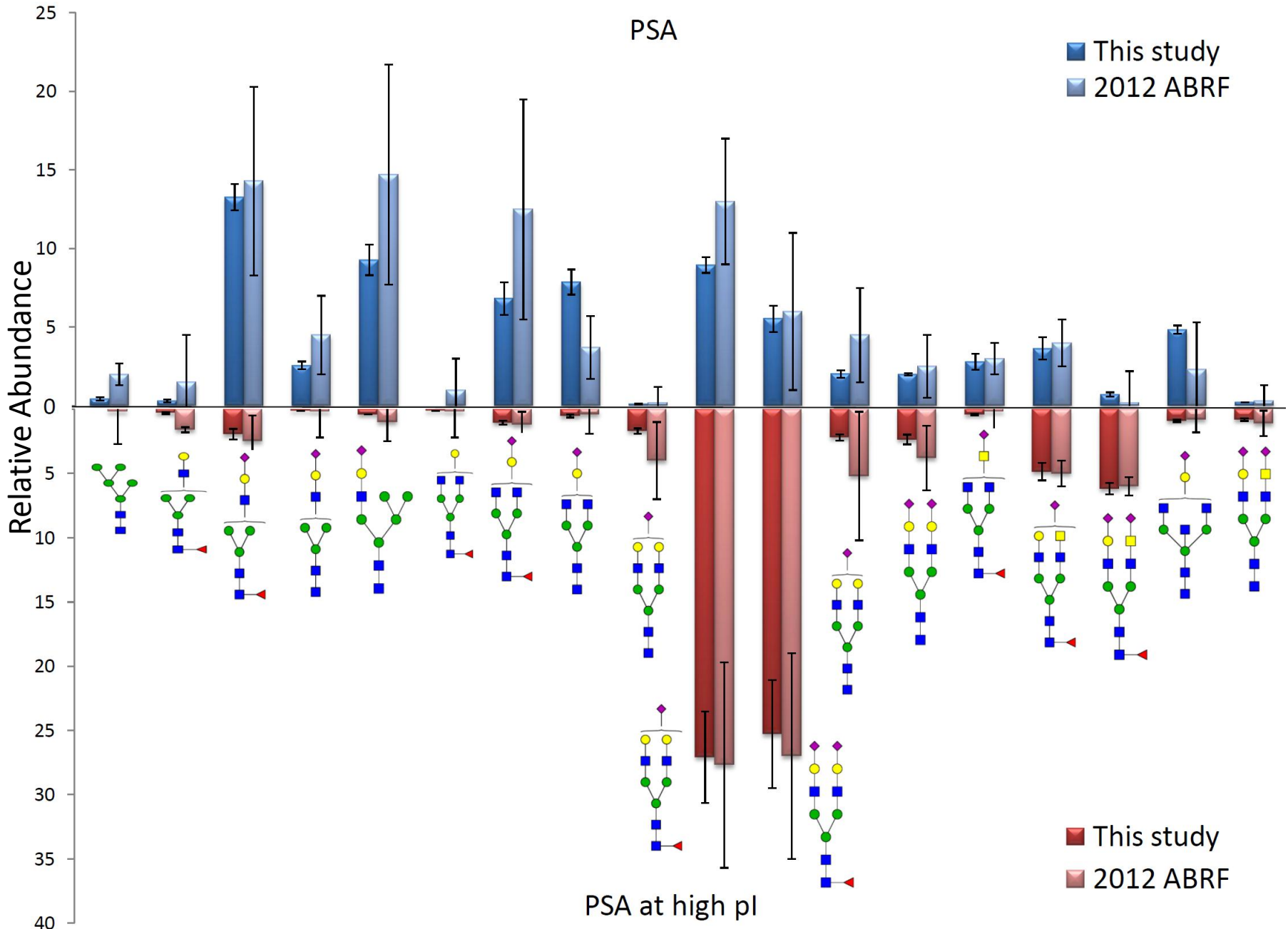
Supplementary Figure 4B. Peak areas of glycoforms associated with 3 peptide backbones identified from PSA at high pl.



Supplementary Figure 5A. Comparisons of total identified glycoforms with the 2012 ABRF study and the published study by Behnken *et al.*



Supplementary Figure 5B. Comparisons of quantitative values of 18 major/intermediate glycoforms identified from the 2012 ABRF study and this study.



Supplementary Figure 5C. Comparisons of quantitative values of 32 common glycoforms identified from the published study by Behnken *et al* and this study.

