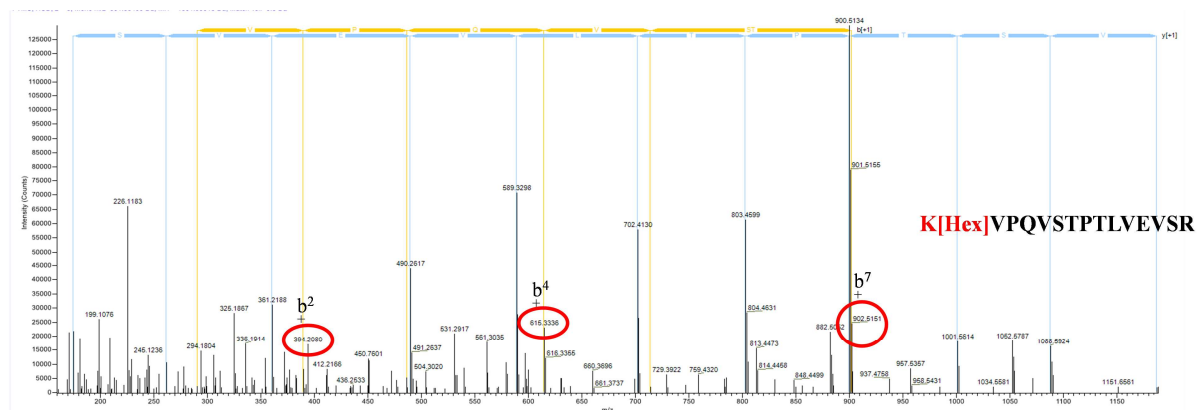
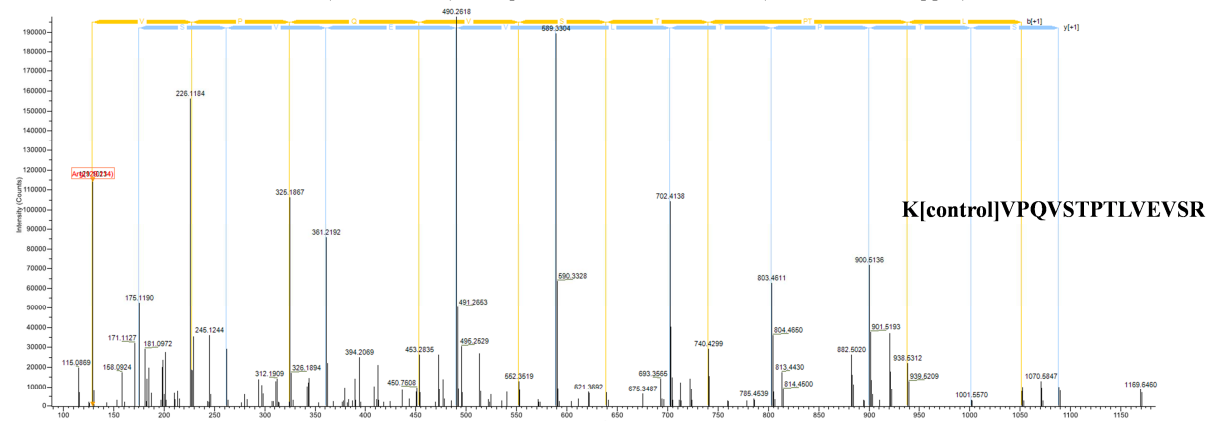


Figure 1. (Supplementary) Representative Annotation of AGE modified peptide

Annotation of AGE modified peptide in comparison with control peptide



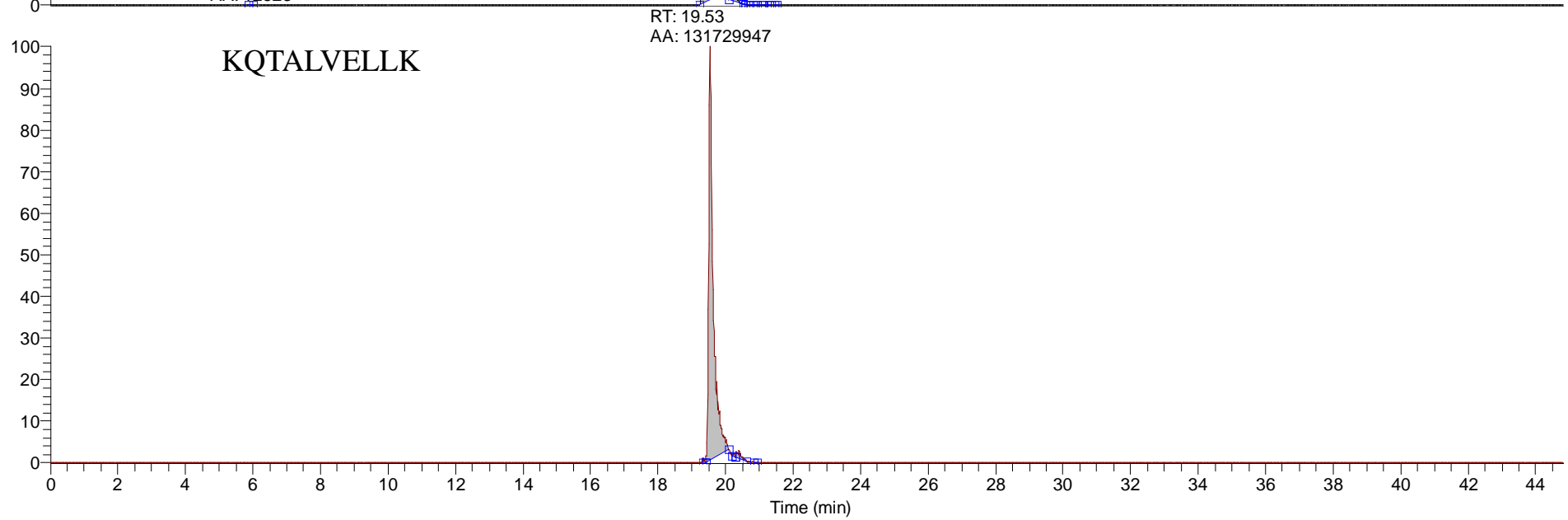
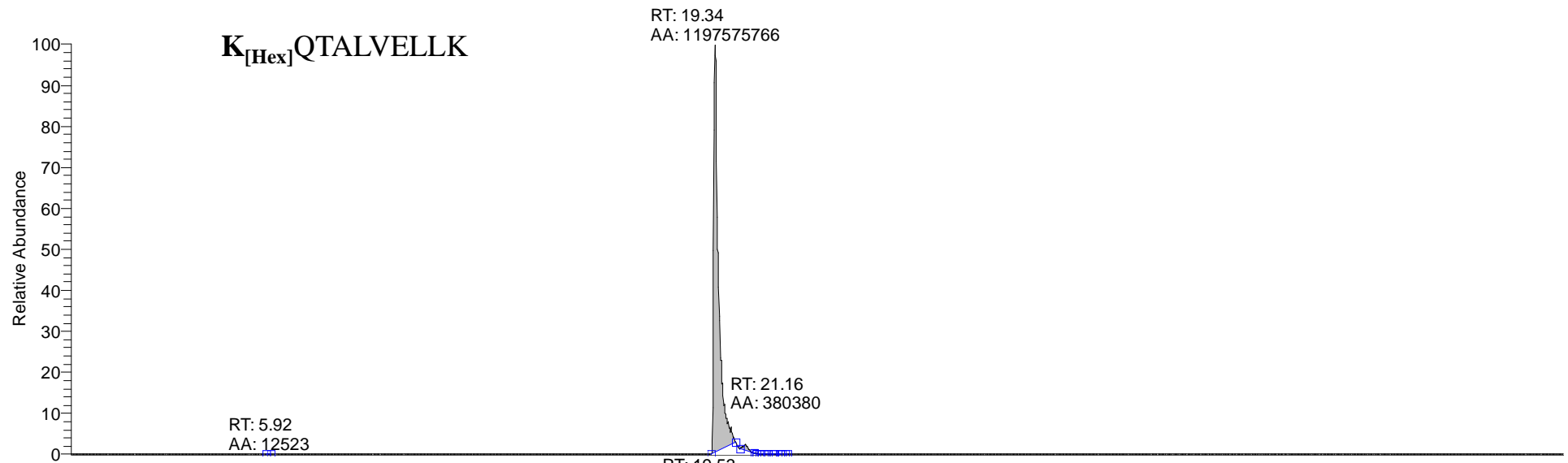
K[Hex]VPQVSTPTLVEVSR, K1-(162.0528 Da) Charge: +3, m/z: 601.33527 Da (+0.2 mmu/+0.33ppm), MH+: 1801.9912 Da.

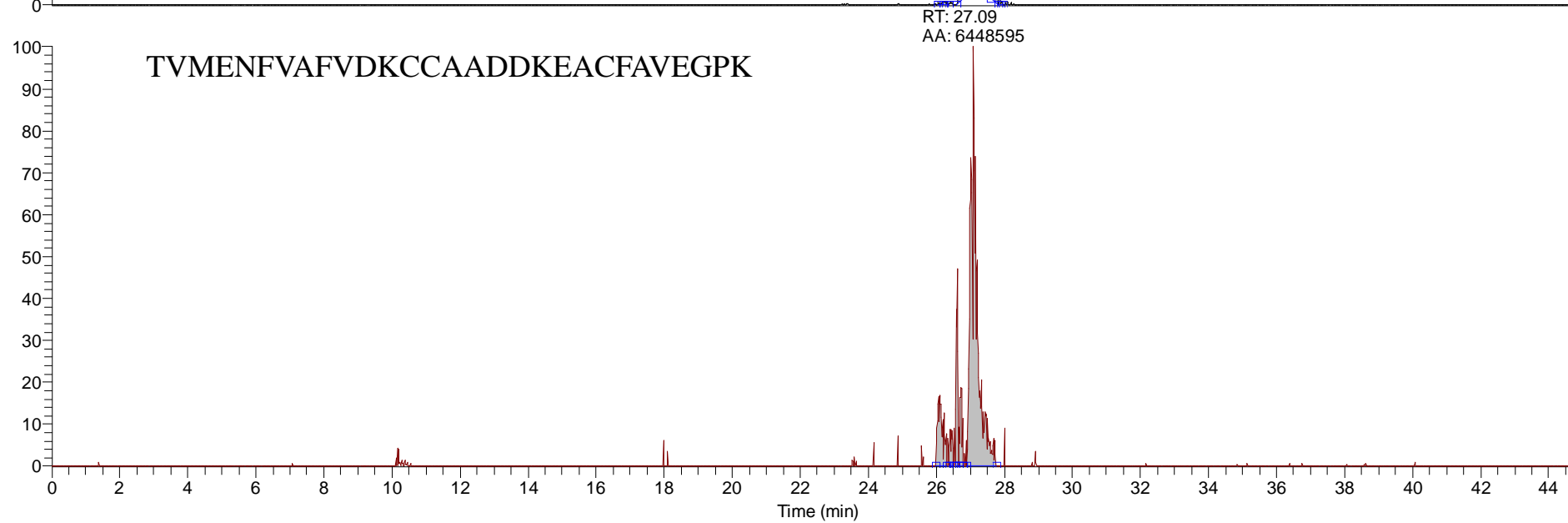
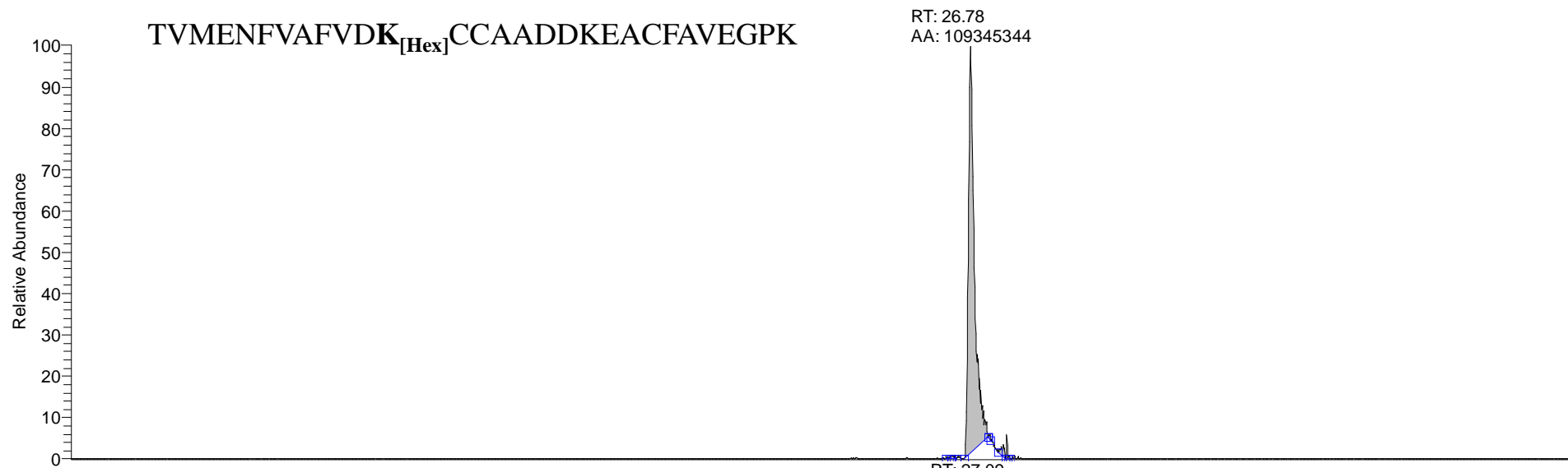


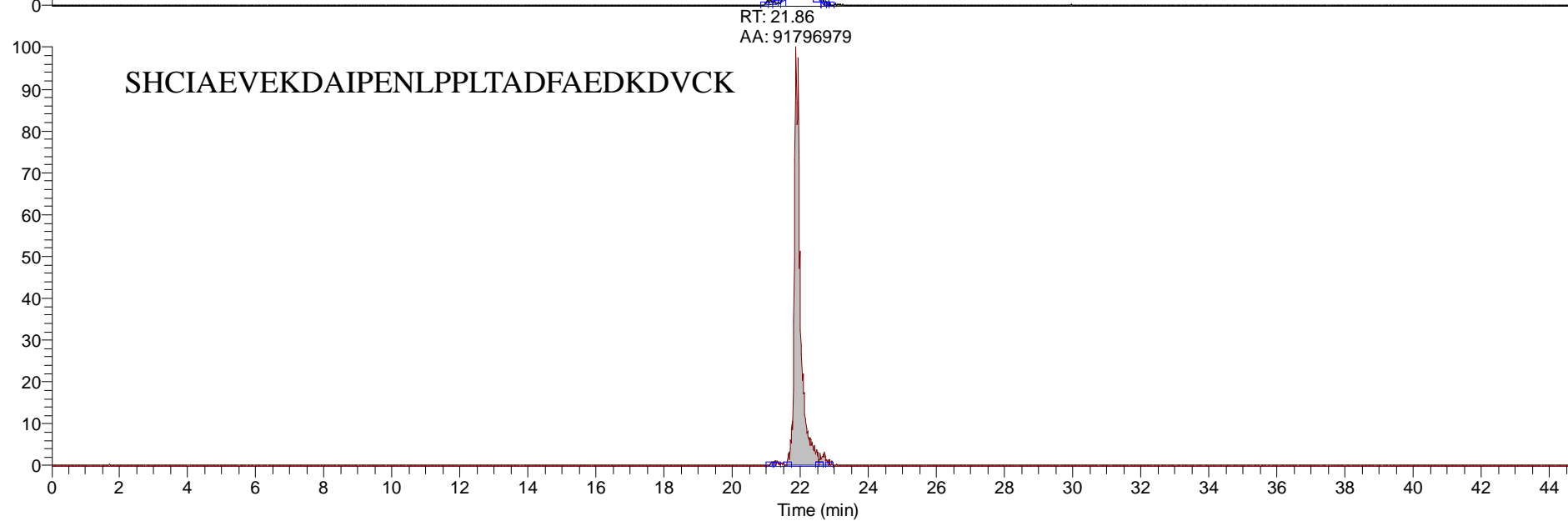
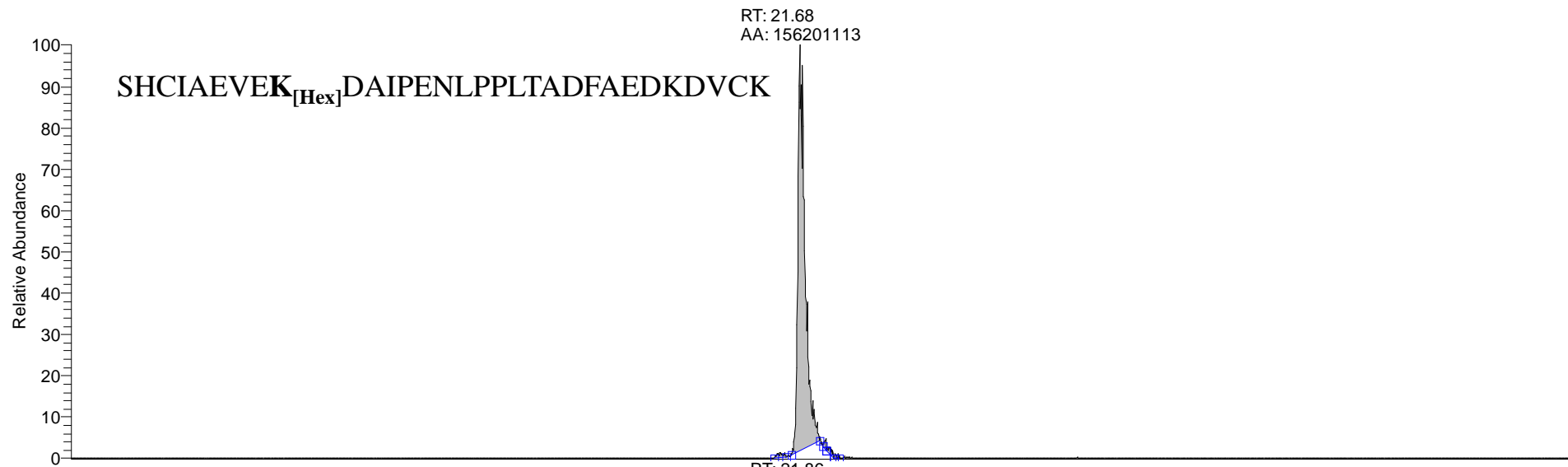
KVPQVSTPTLVEVSR Charge: +3, m/z: 547.31873 Da (+1.27 mmu/+2.32ppm), MH+: 1639.94162 Da

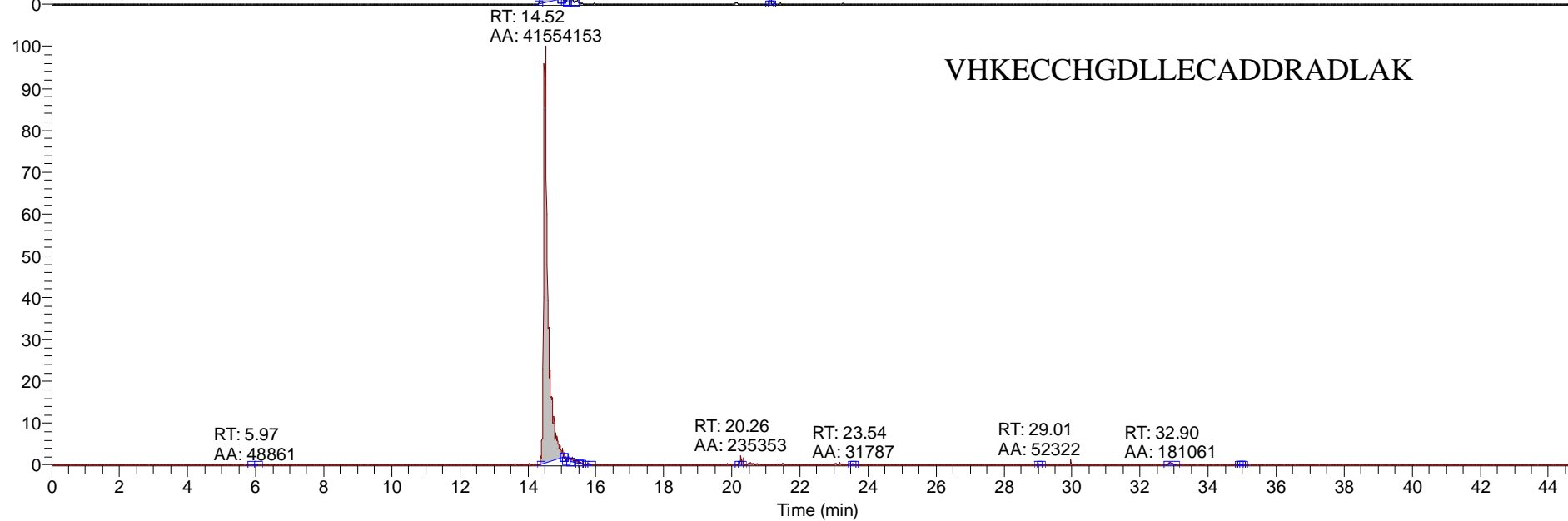
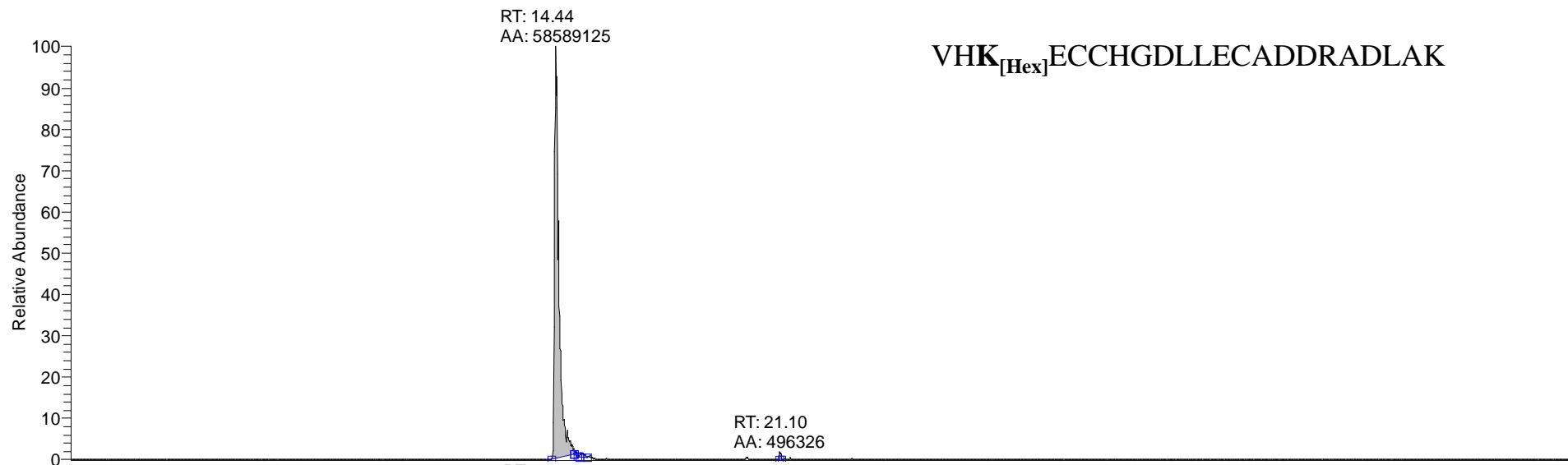
Figure 2. (Supplementary) Area under curve ratio of few modified to unmodified peptides in glycated BSA, glycated BSA in presence of isoprenaline (10mM) or aminoguanidine (10mM).

Glycated modified peptides of BSA – XIC's

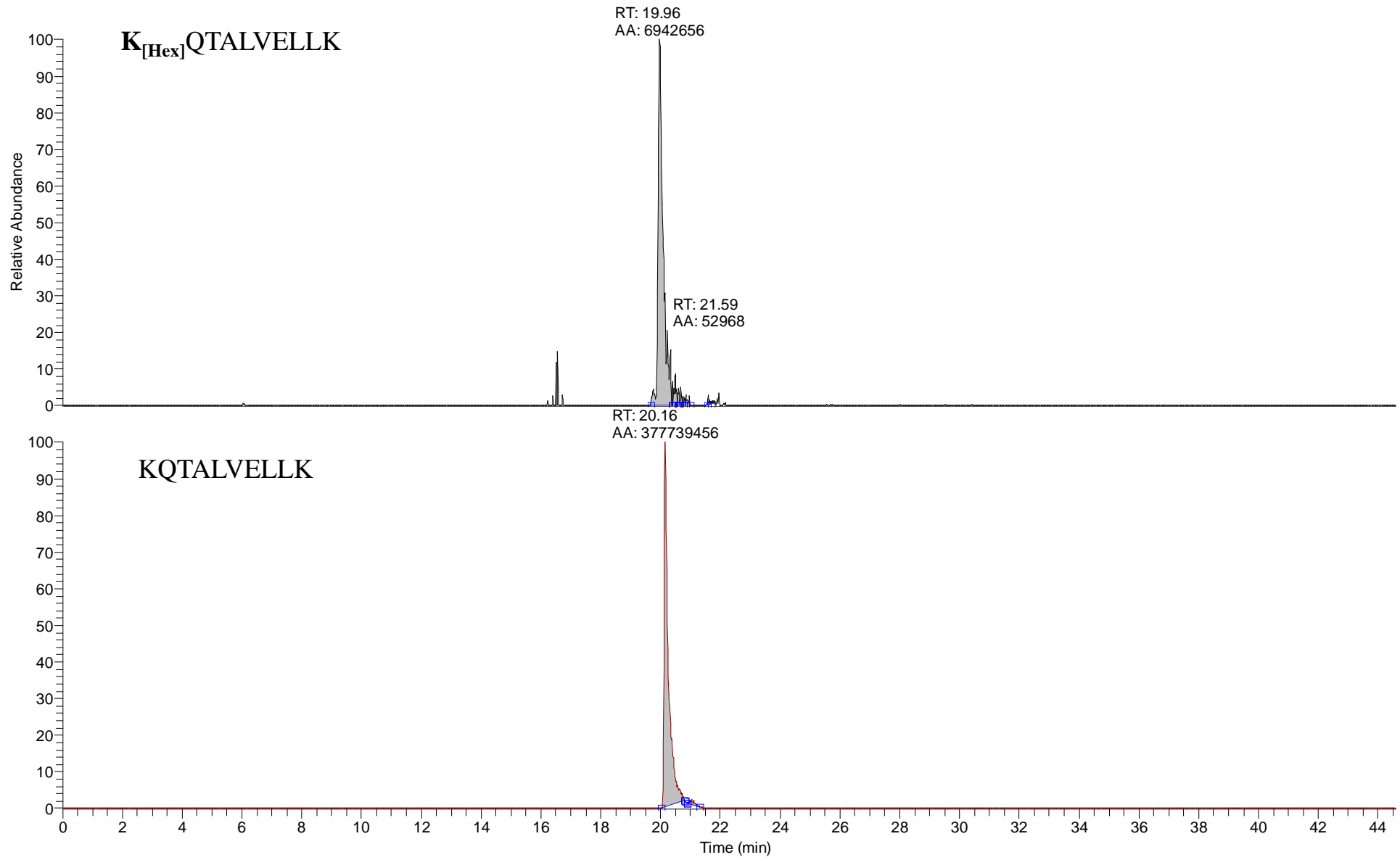


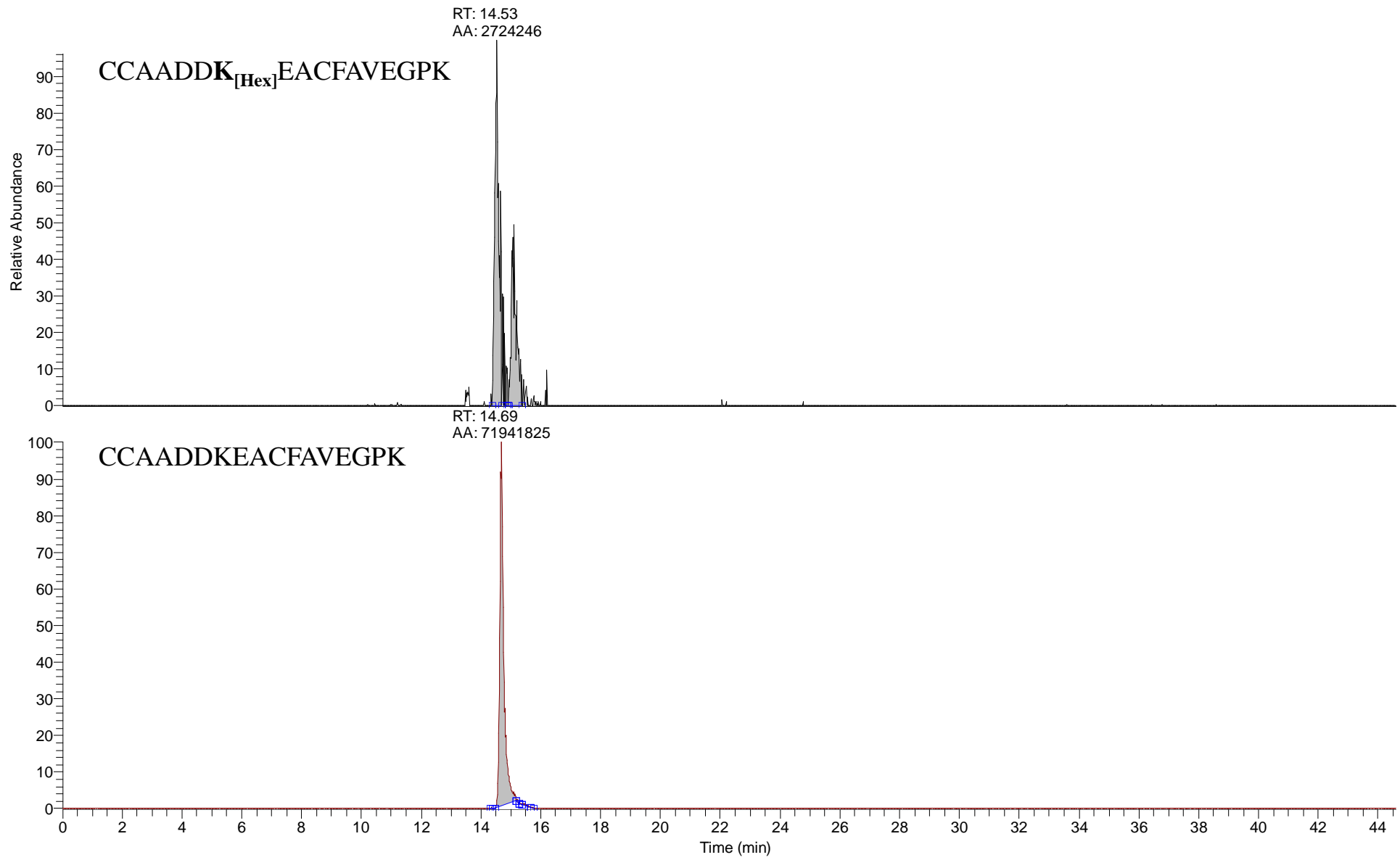


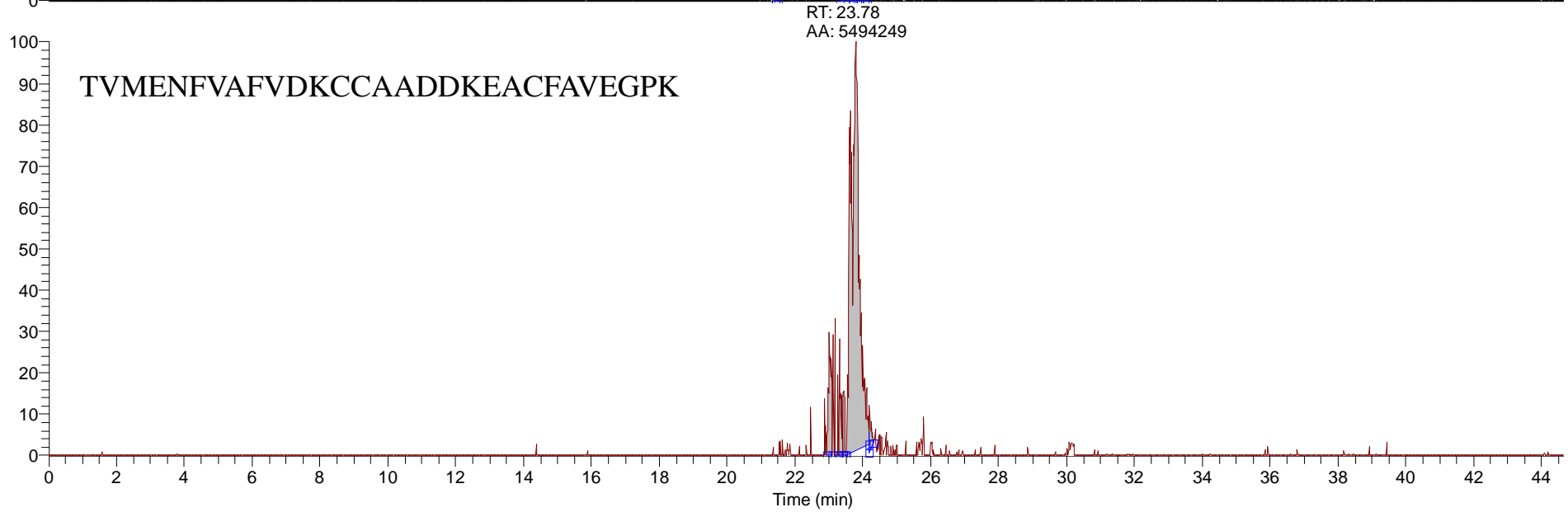
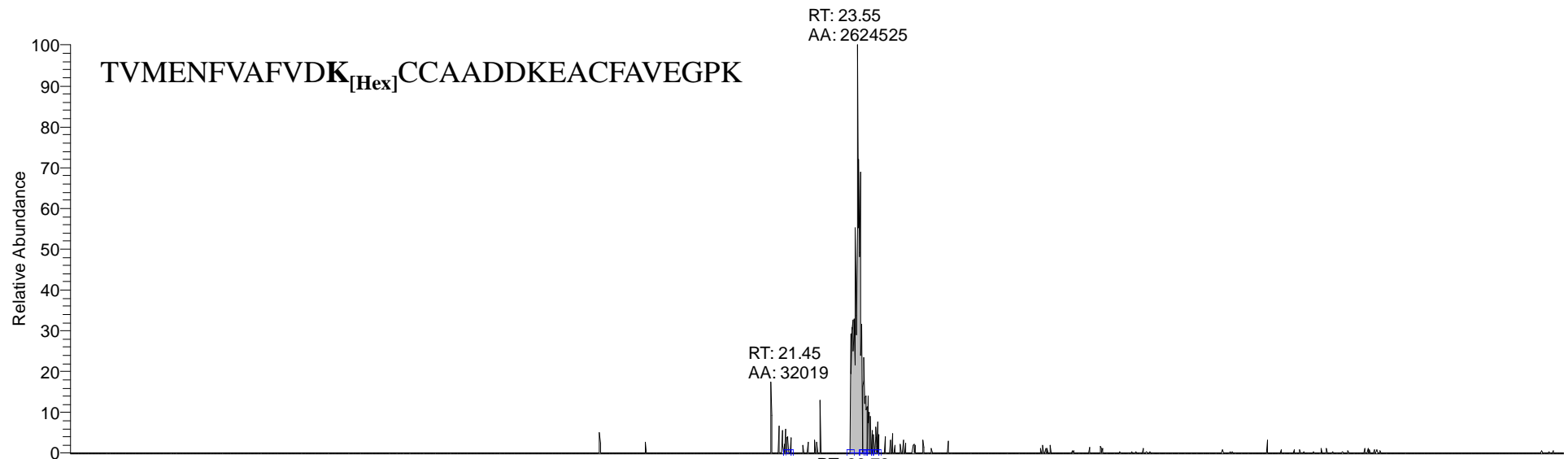


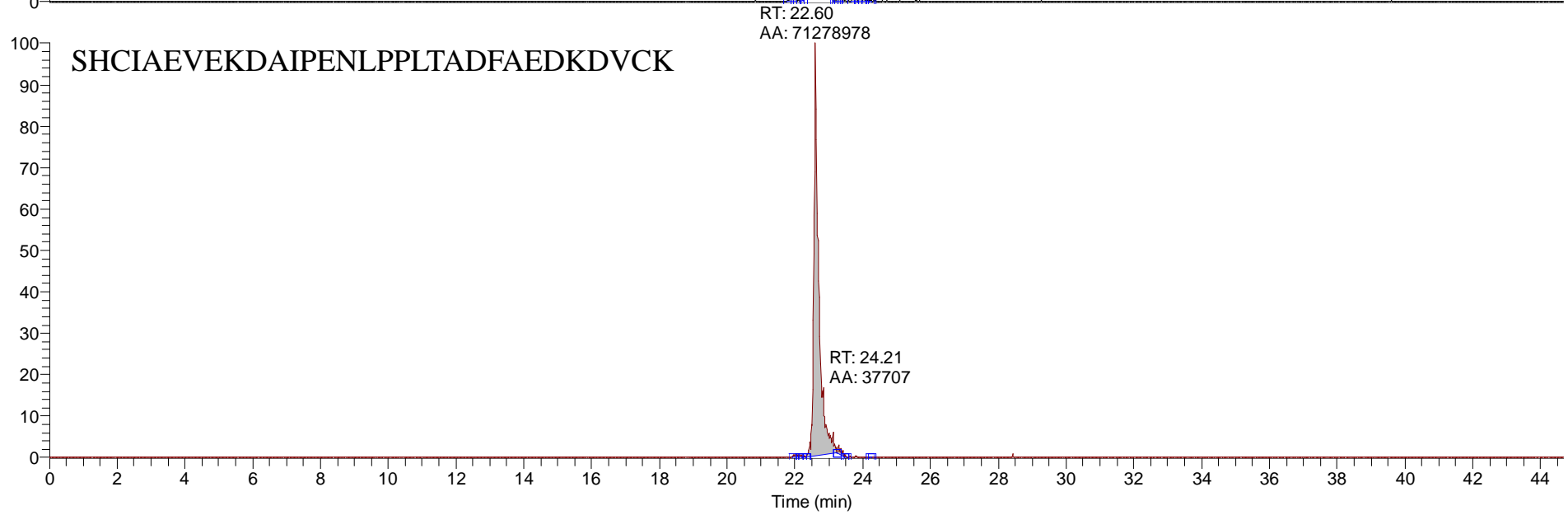
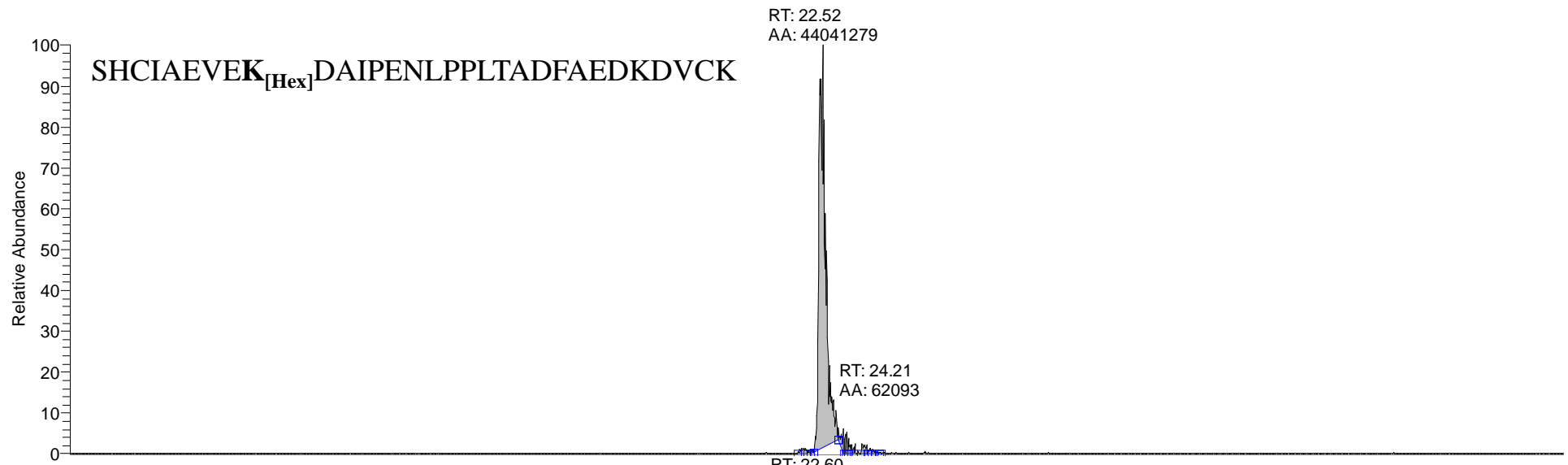


**Glycated modified peptides of BSA treated with Isoprenaline –
XIC's**







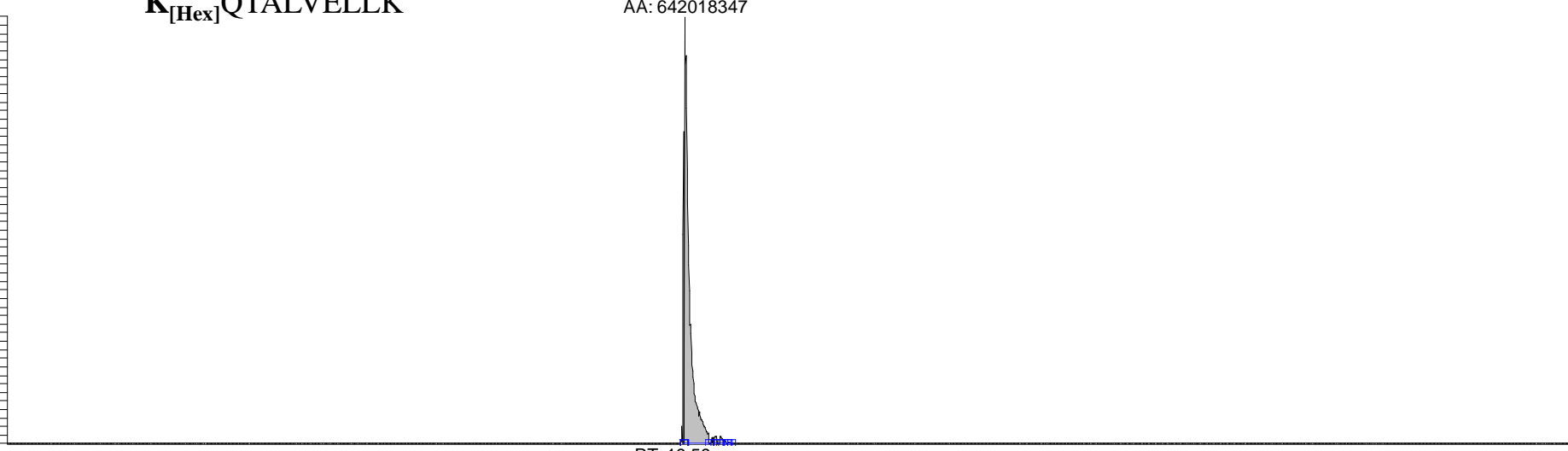
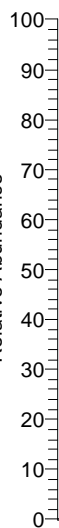


**Glycated modified peptides of BSA treated with Aminoguanidine
– XIC's**

K_[Hex]QTALVELLK

RT: 19.37
AA: 642018347

Relative Abundance

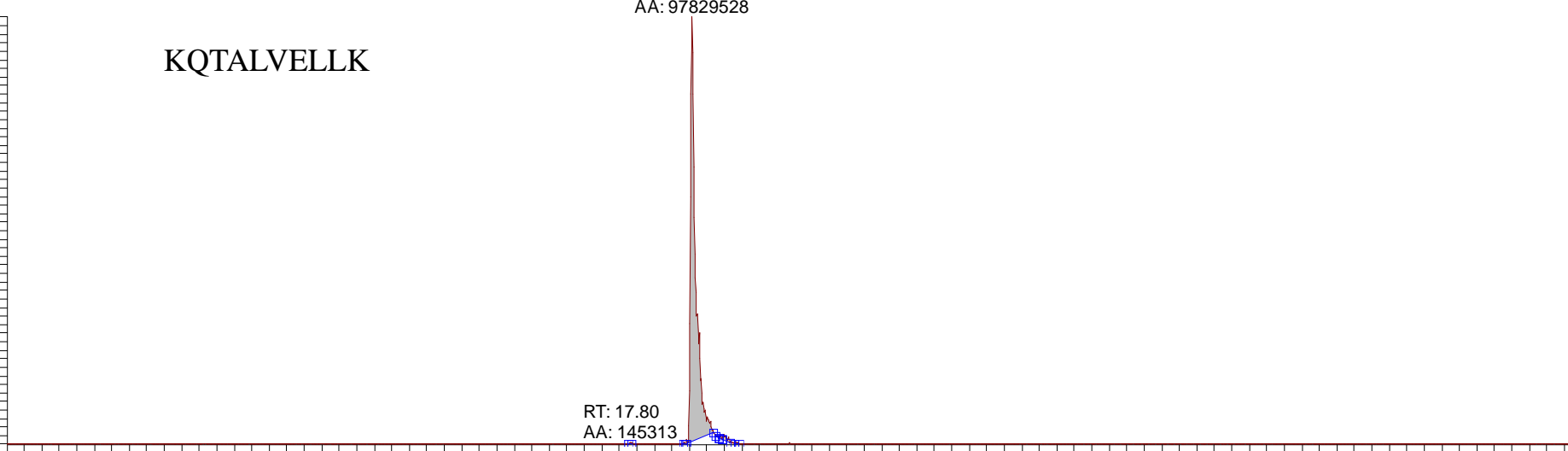
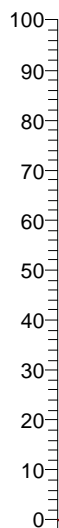


RT: 19.59
AA: 97829528

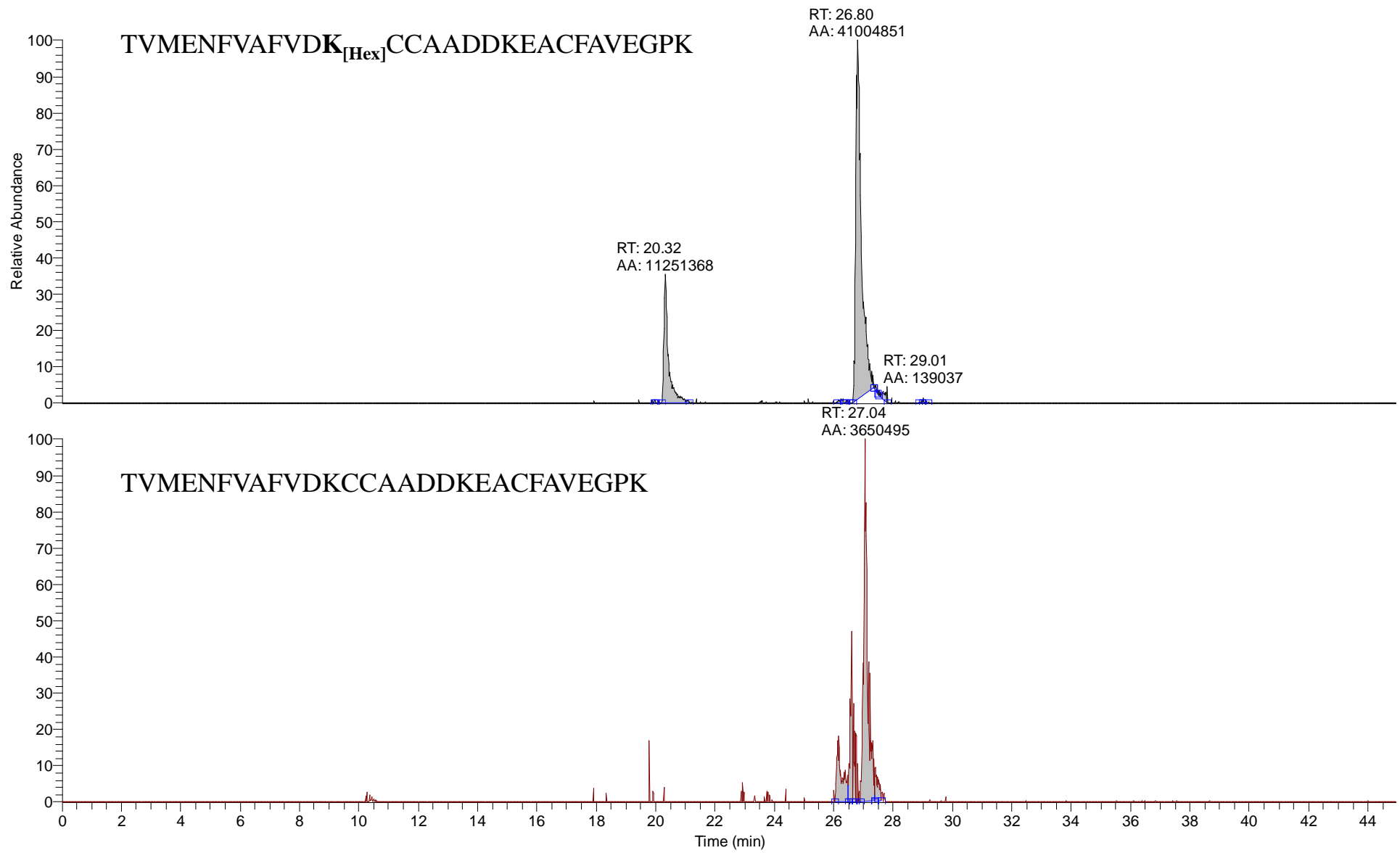
KQTALVELLK

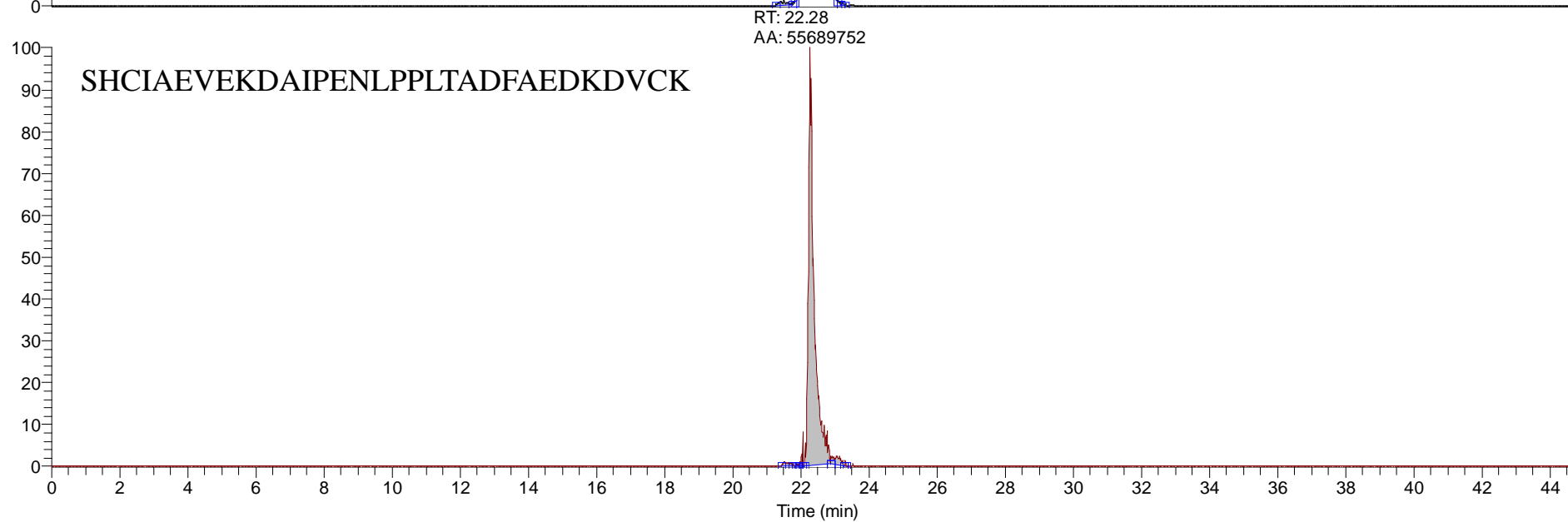
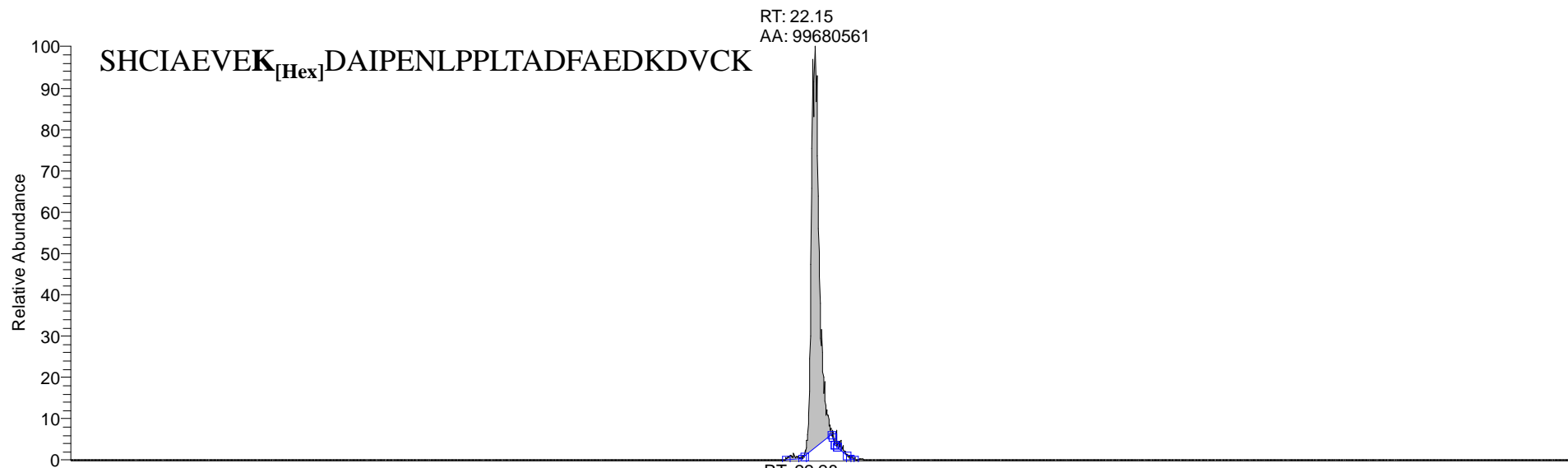
RT: 17.80
AA: 145313

Relative Abundance



Time (min)





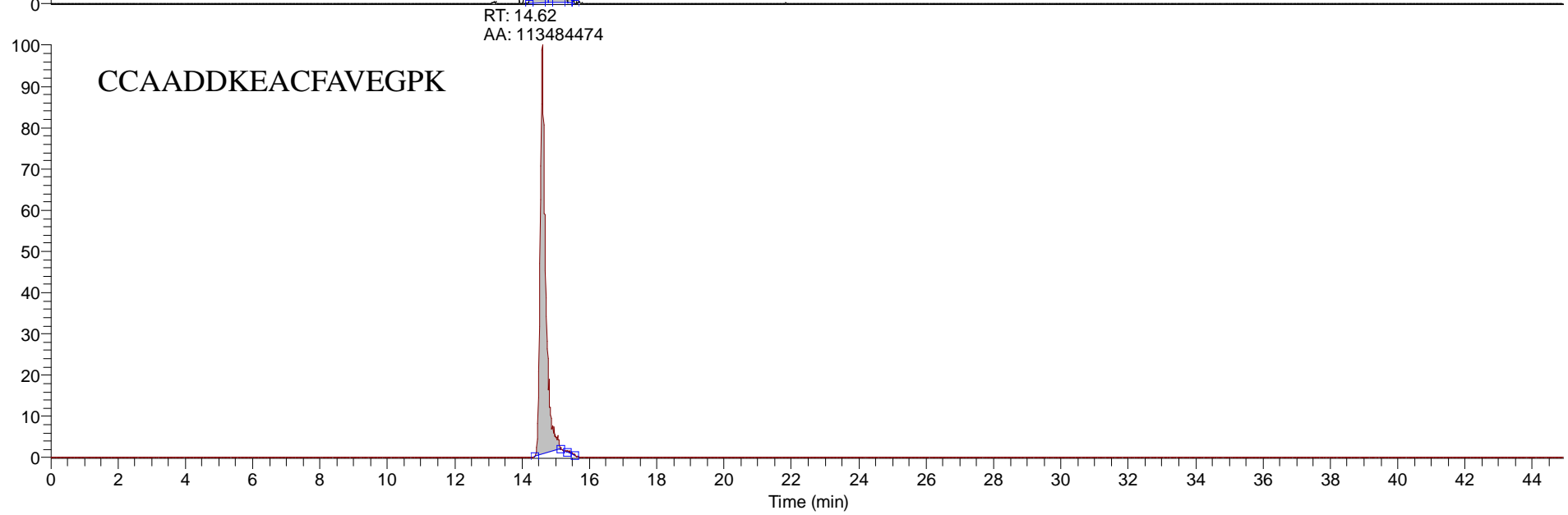
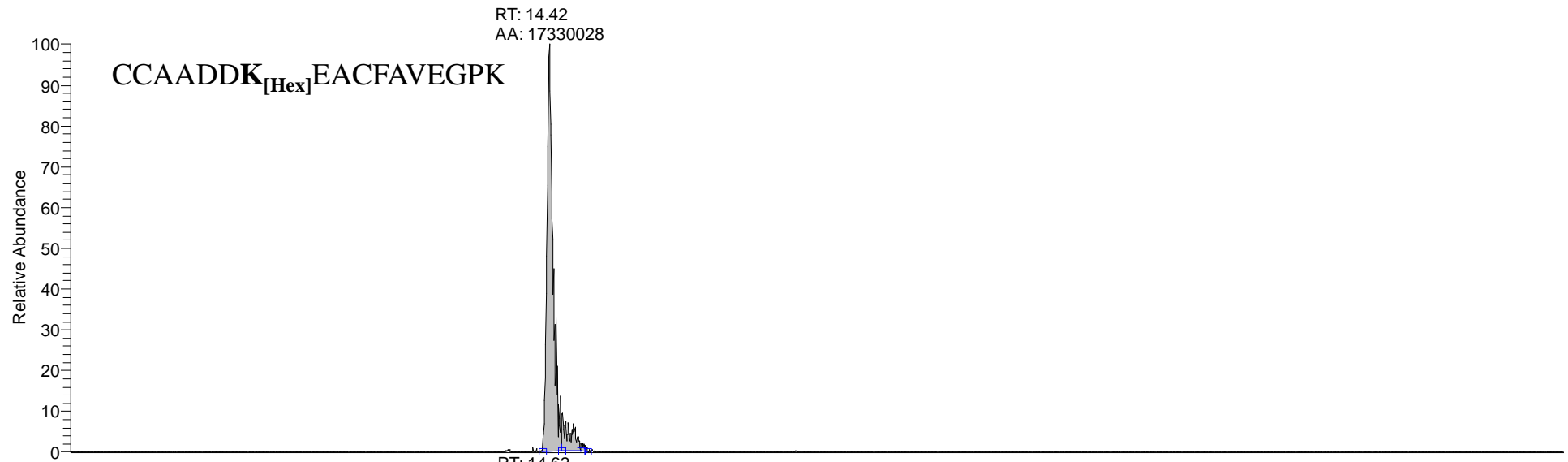
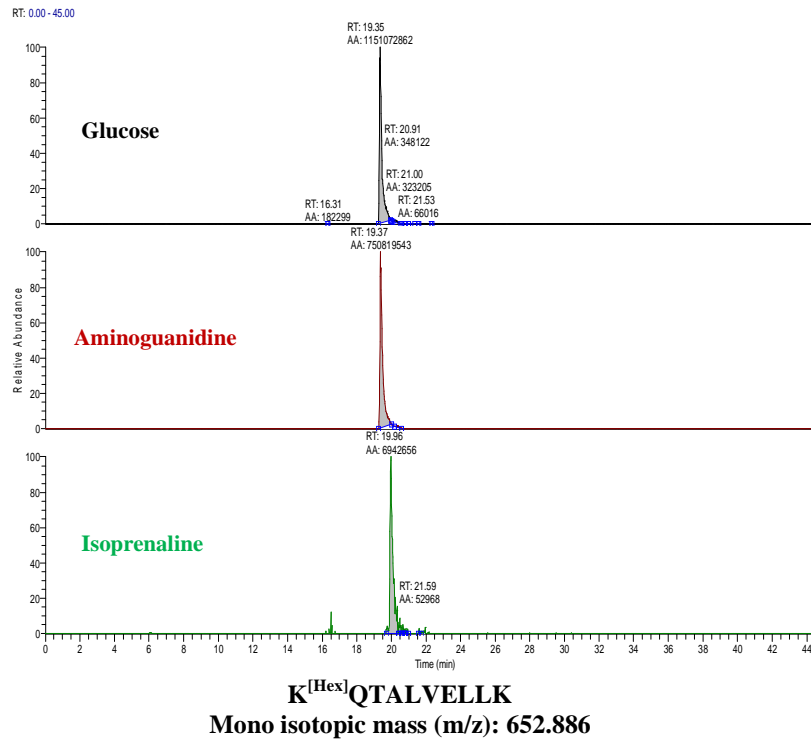
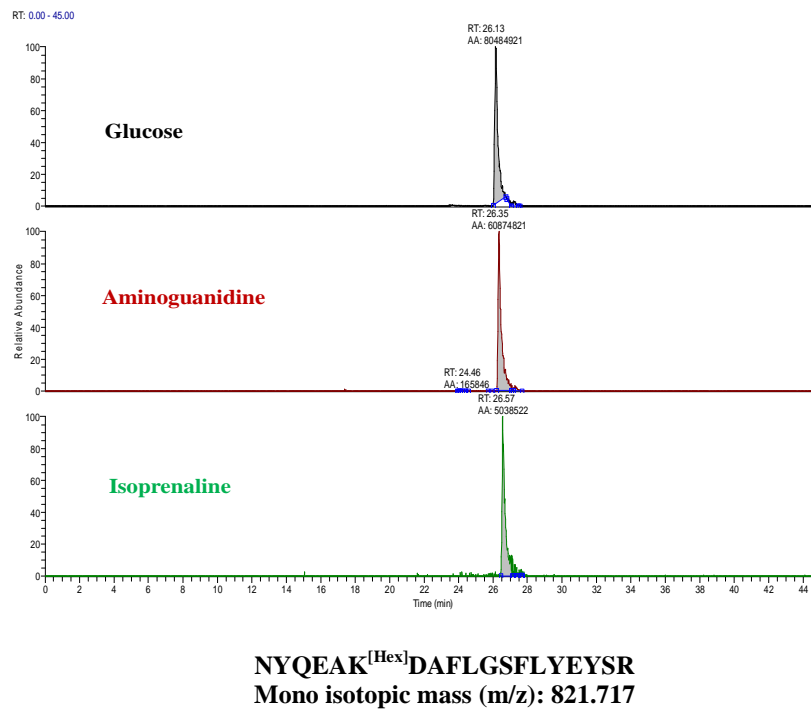


Figure 3. (Supplementary) Extent of glycation quantification of glucose sensitive peptides (GSPs) by extracted ion chromatograms (XIC).

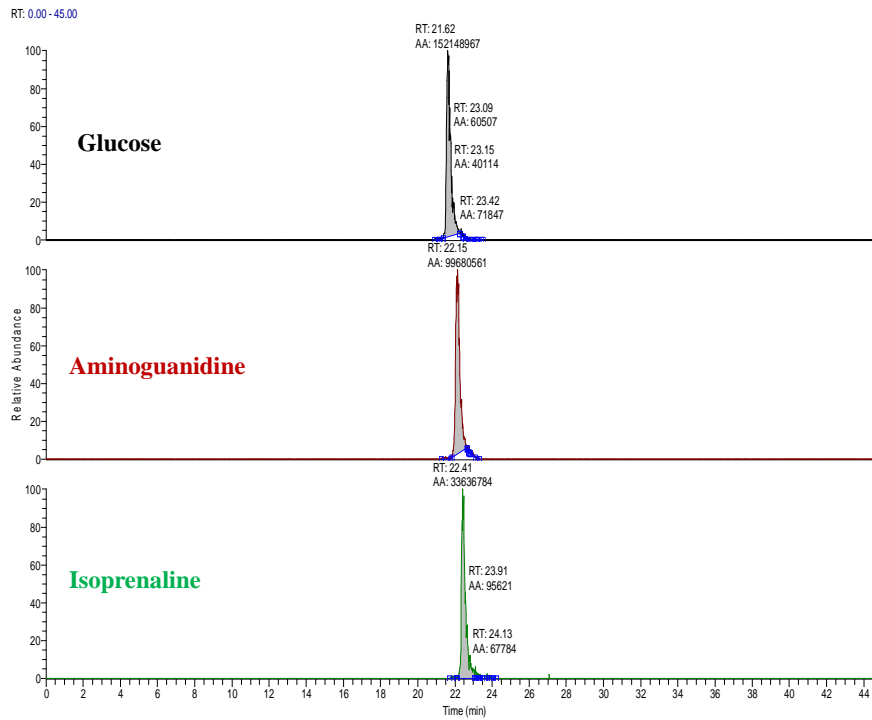
A



B

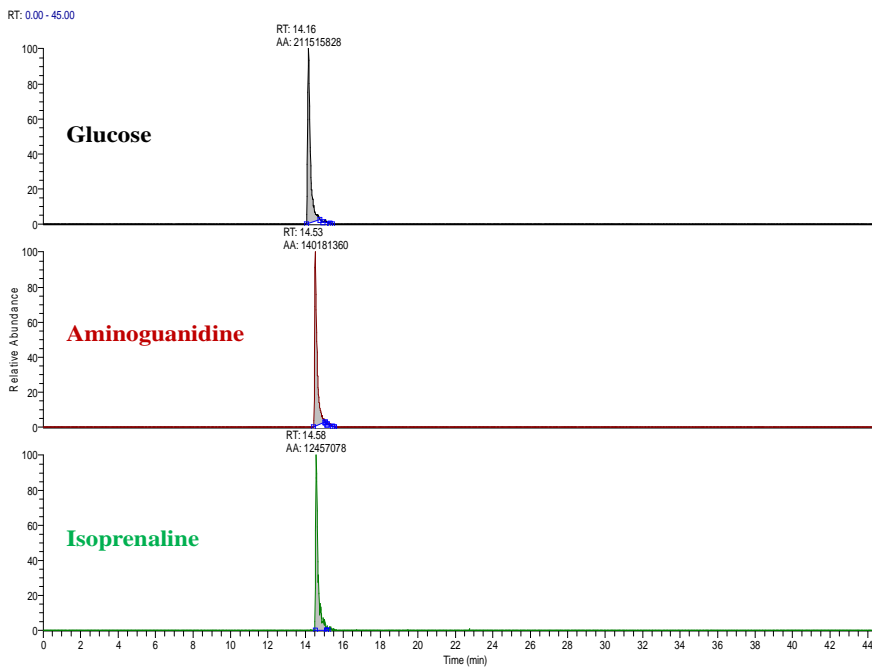


C



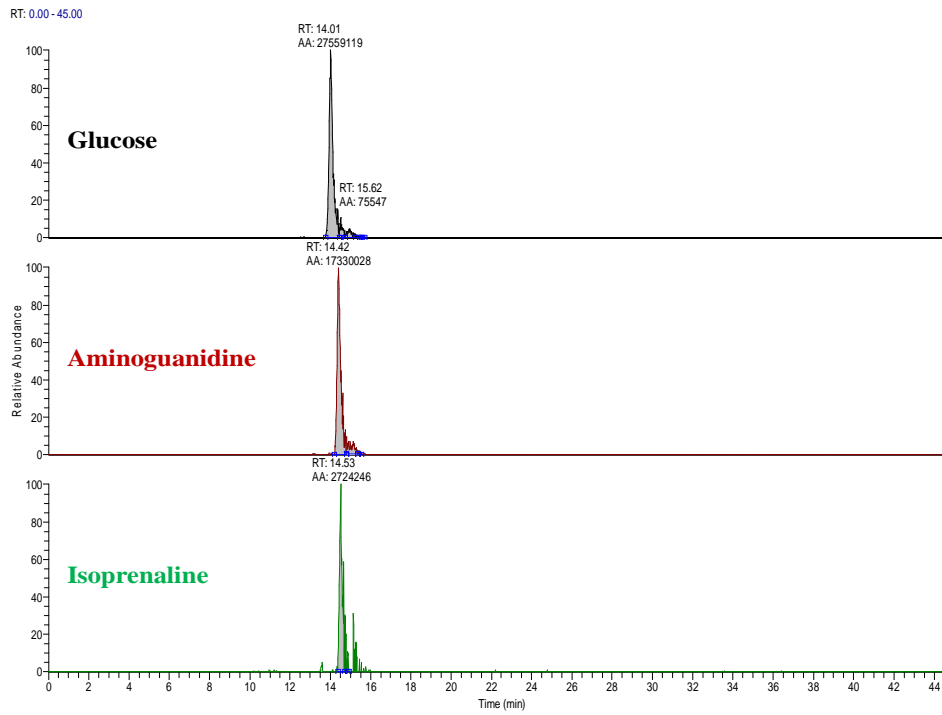
SHCIAEVEK^[Hex]DAIPENLPPLTADFAEDKDVCK
Mono isotopic mass (m/z): 919.184

D



LAK^[Hex]EYEATLEECCA
Mono isotopic mass (m/z): 659.630

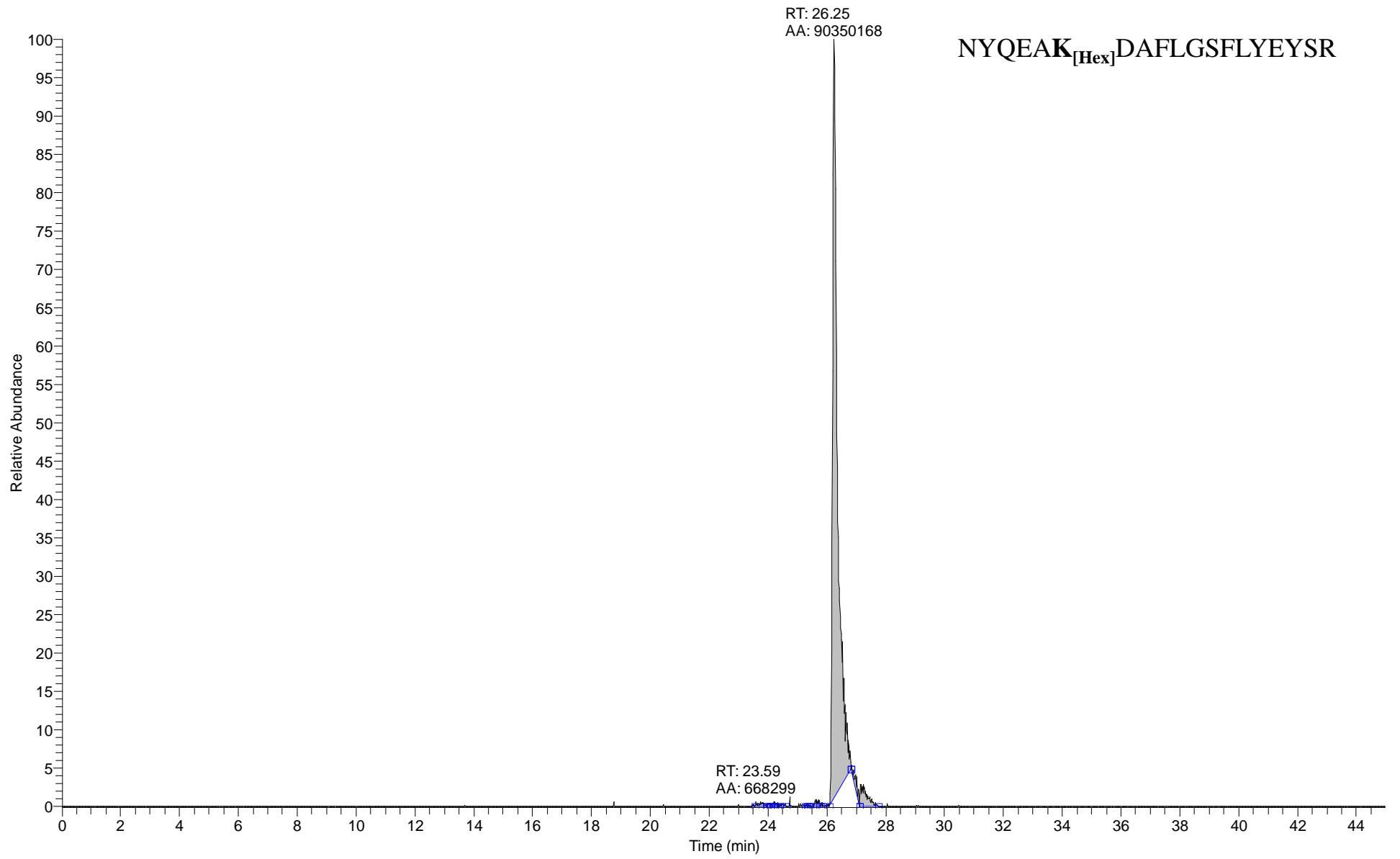
E



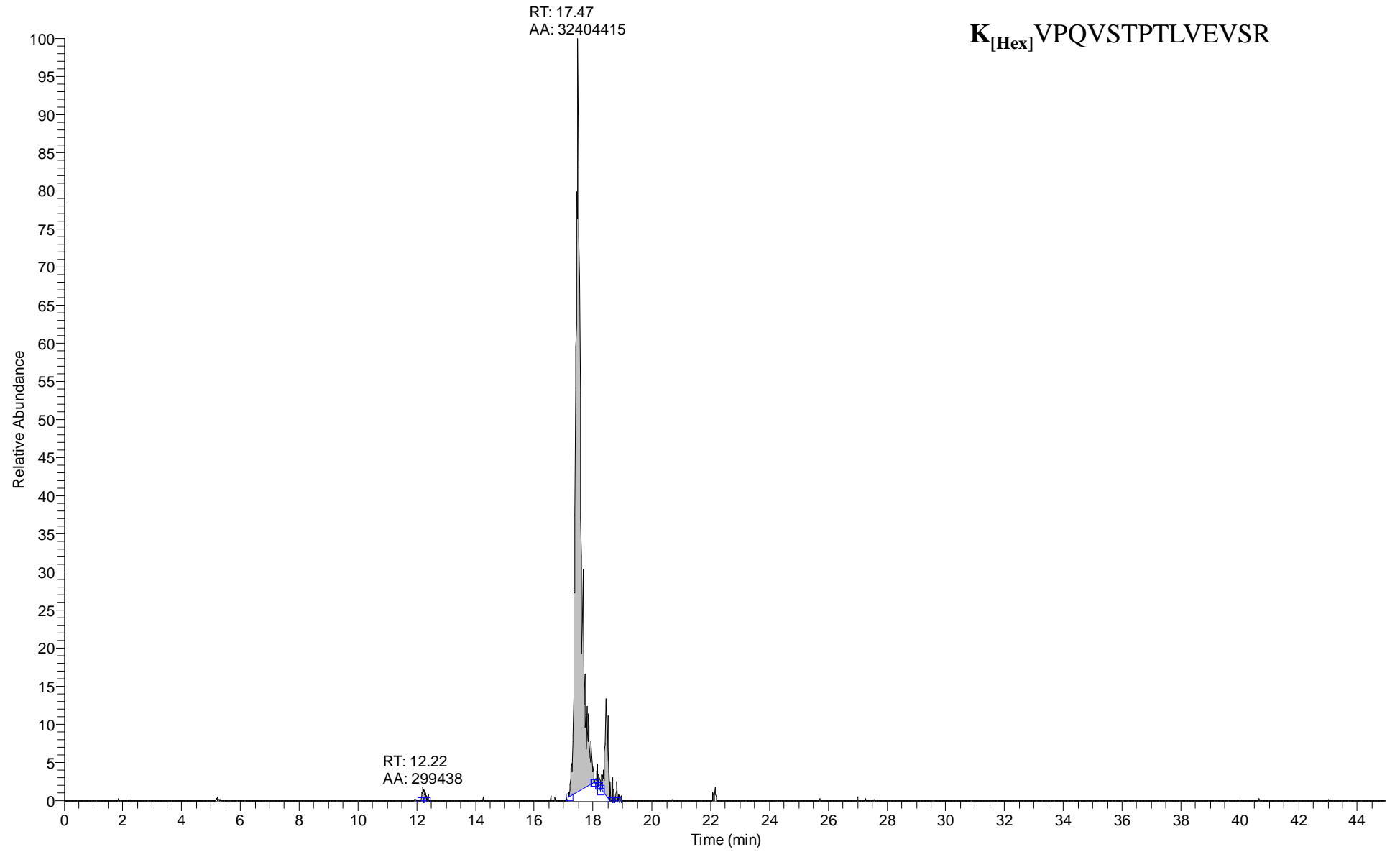
CCAADDK^[Hex]EACFAVEGPK
Mono isotopic mass (m/z): 697.287

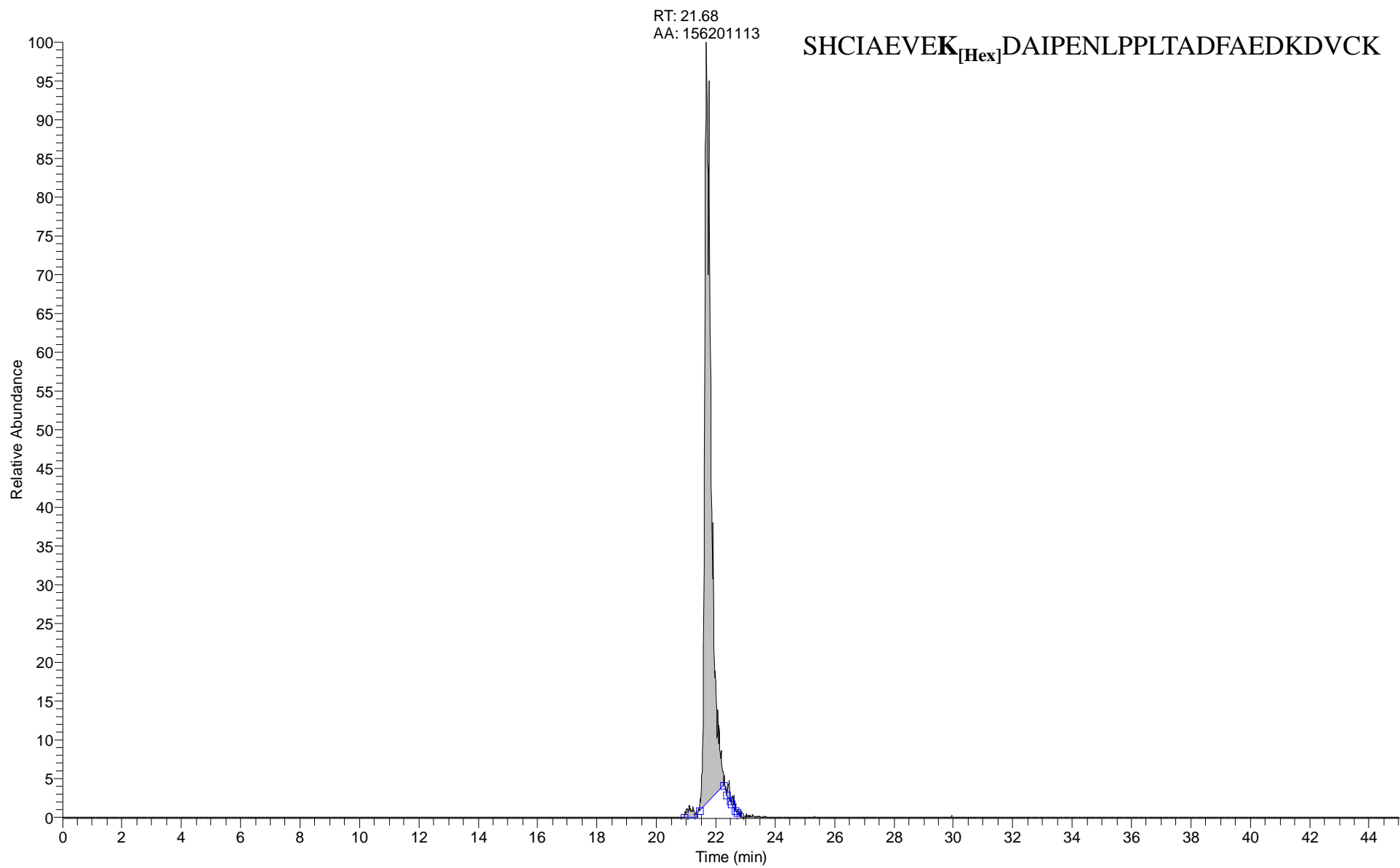
Figure 4. (Supplementary) Extent of glycation quantification of glucose sensitive peptides (GSPs) by extracted ion chromatograms (XIC).

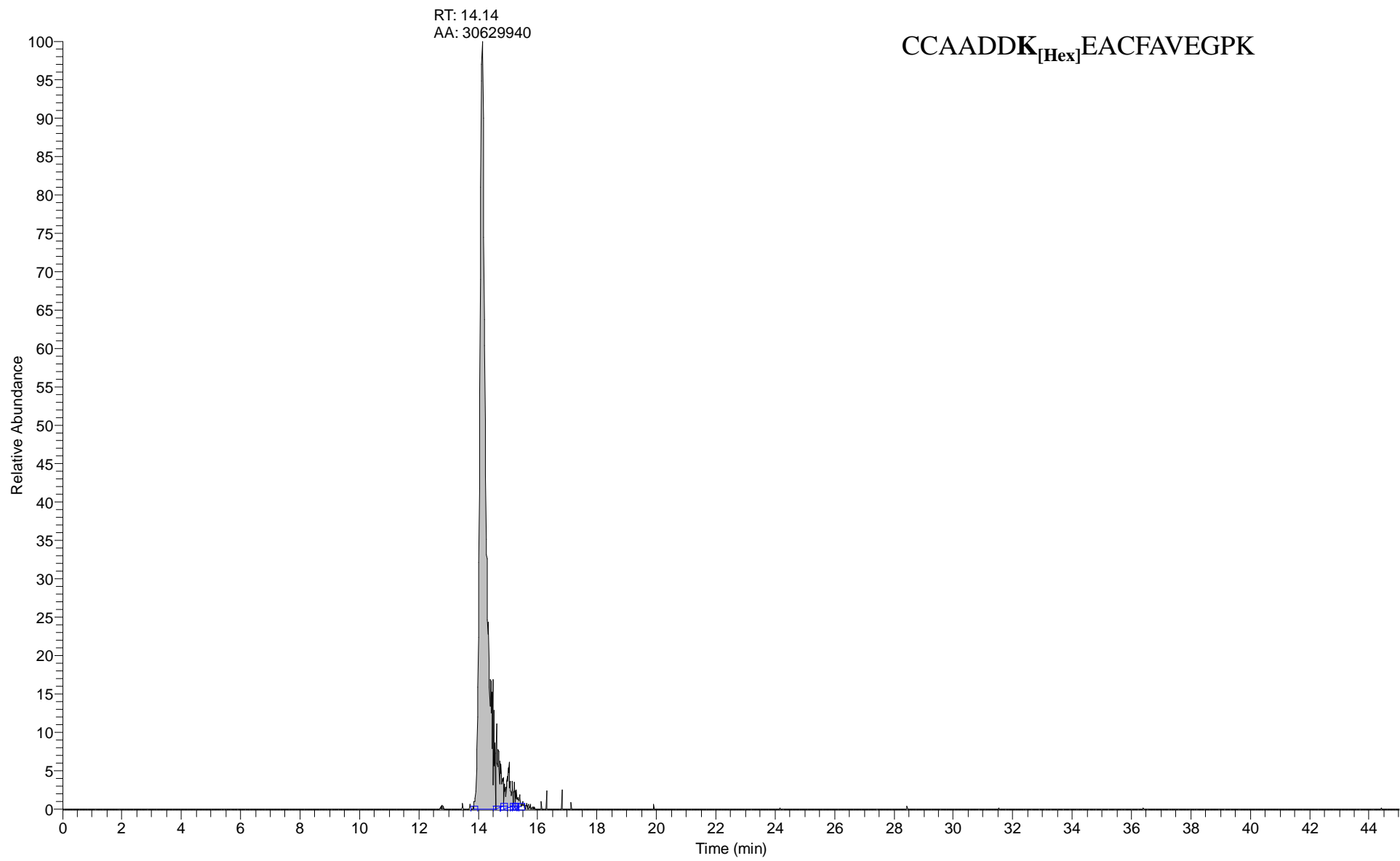
Glycated modified peptides of BSA – XIC's

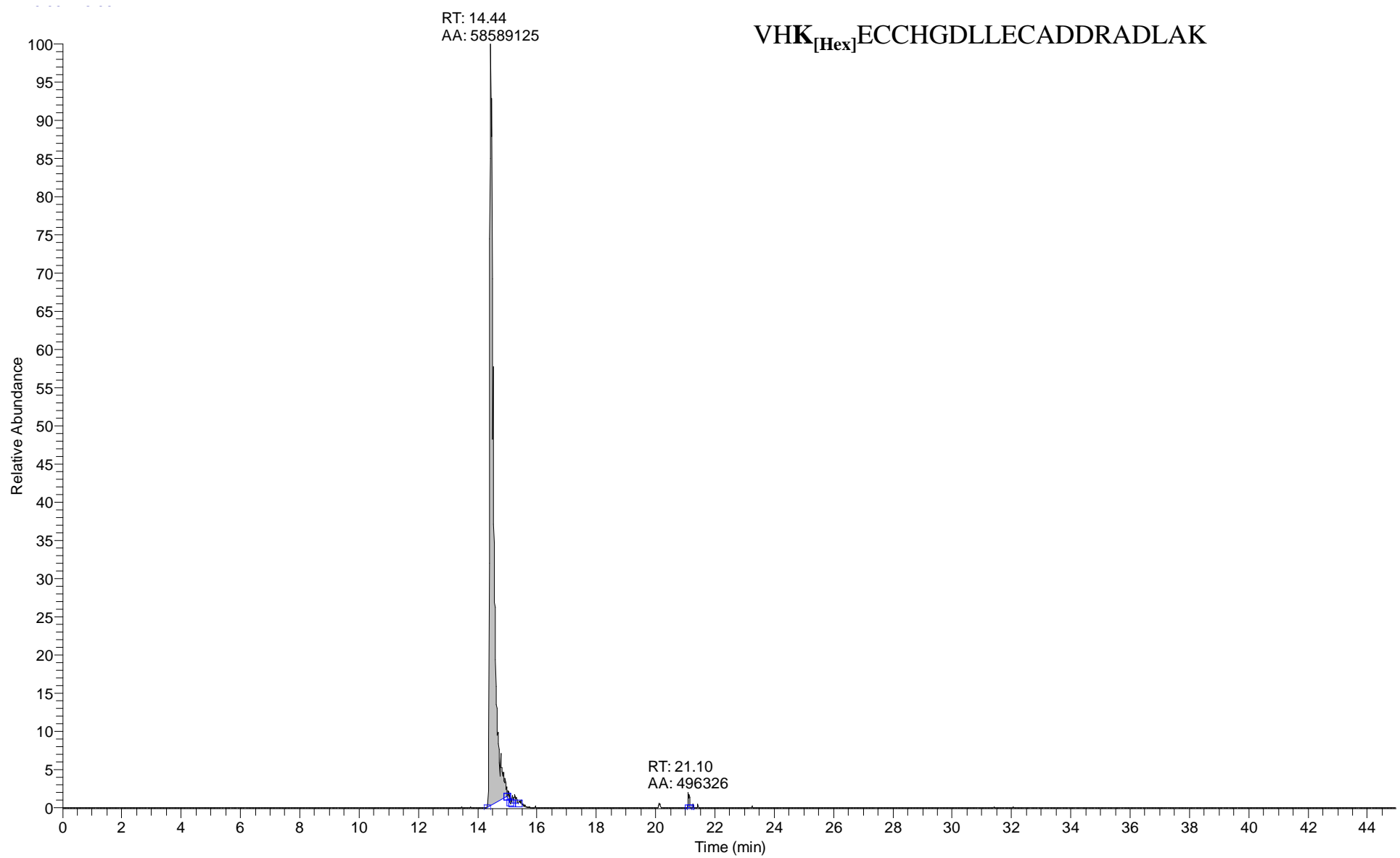


K_[Hex]VPQVSTPTLVEVSR

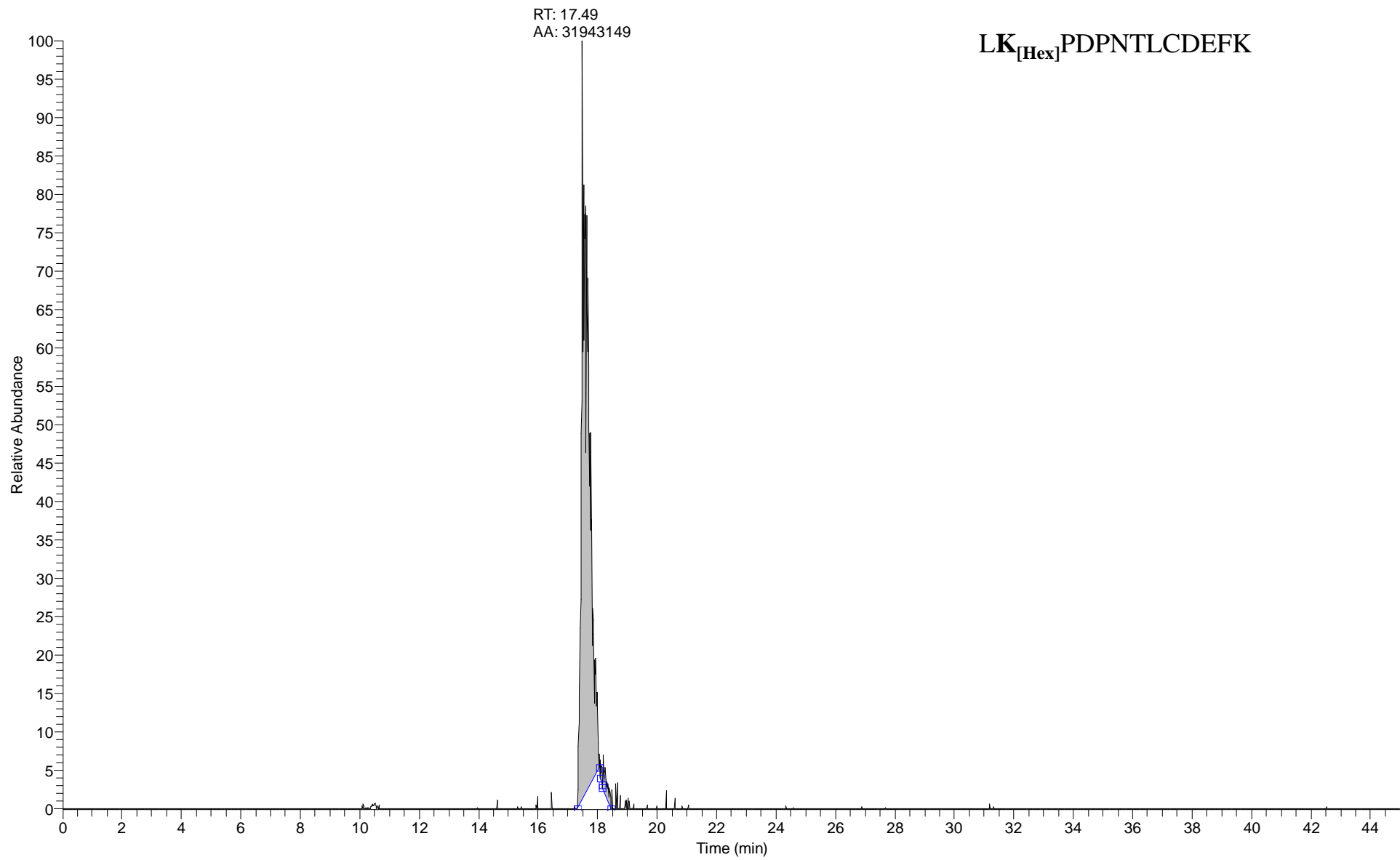




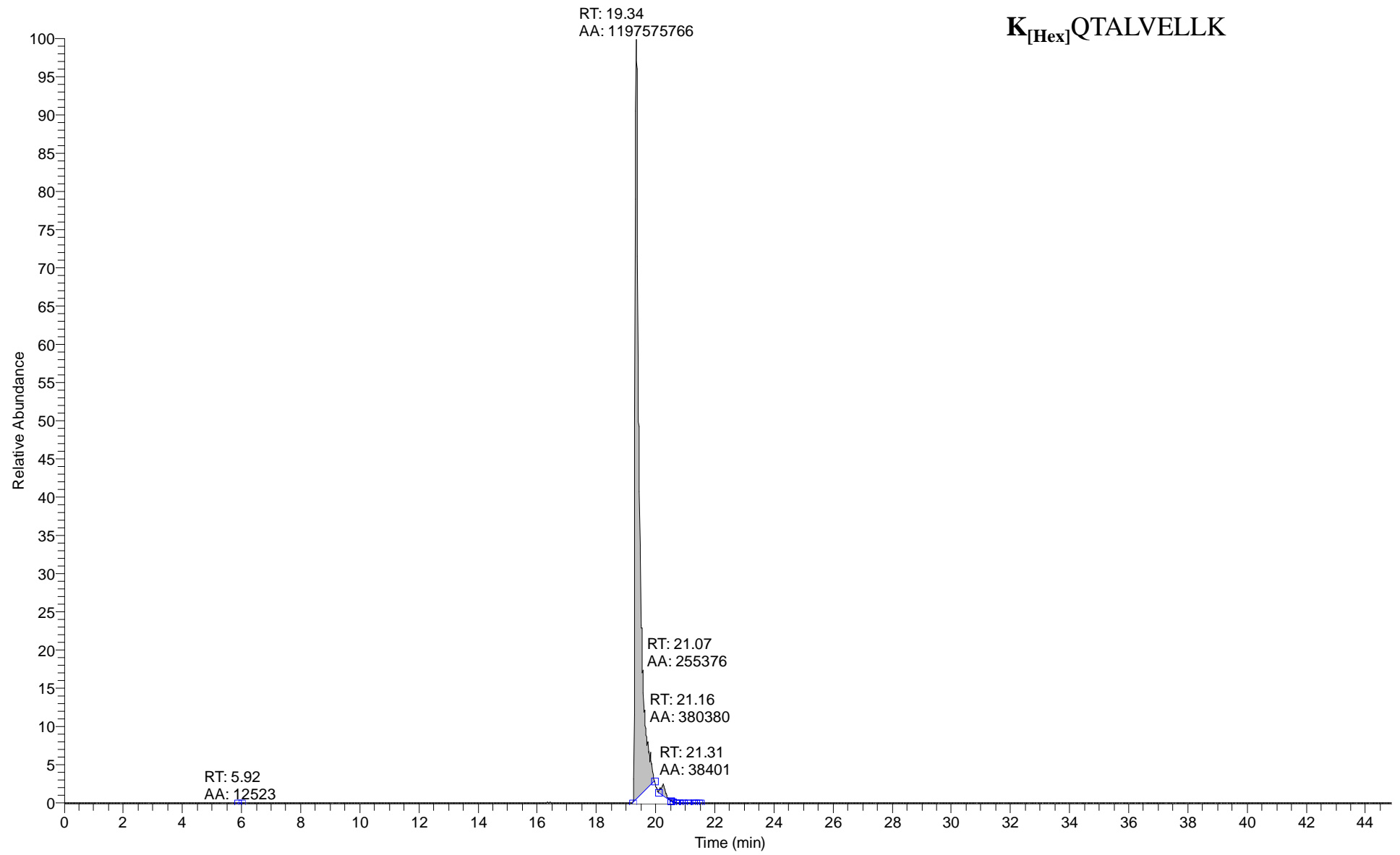


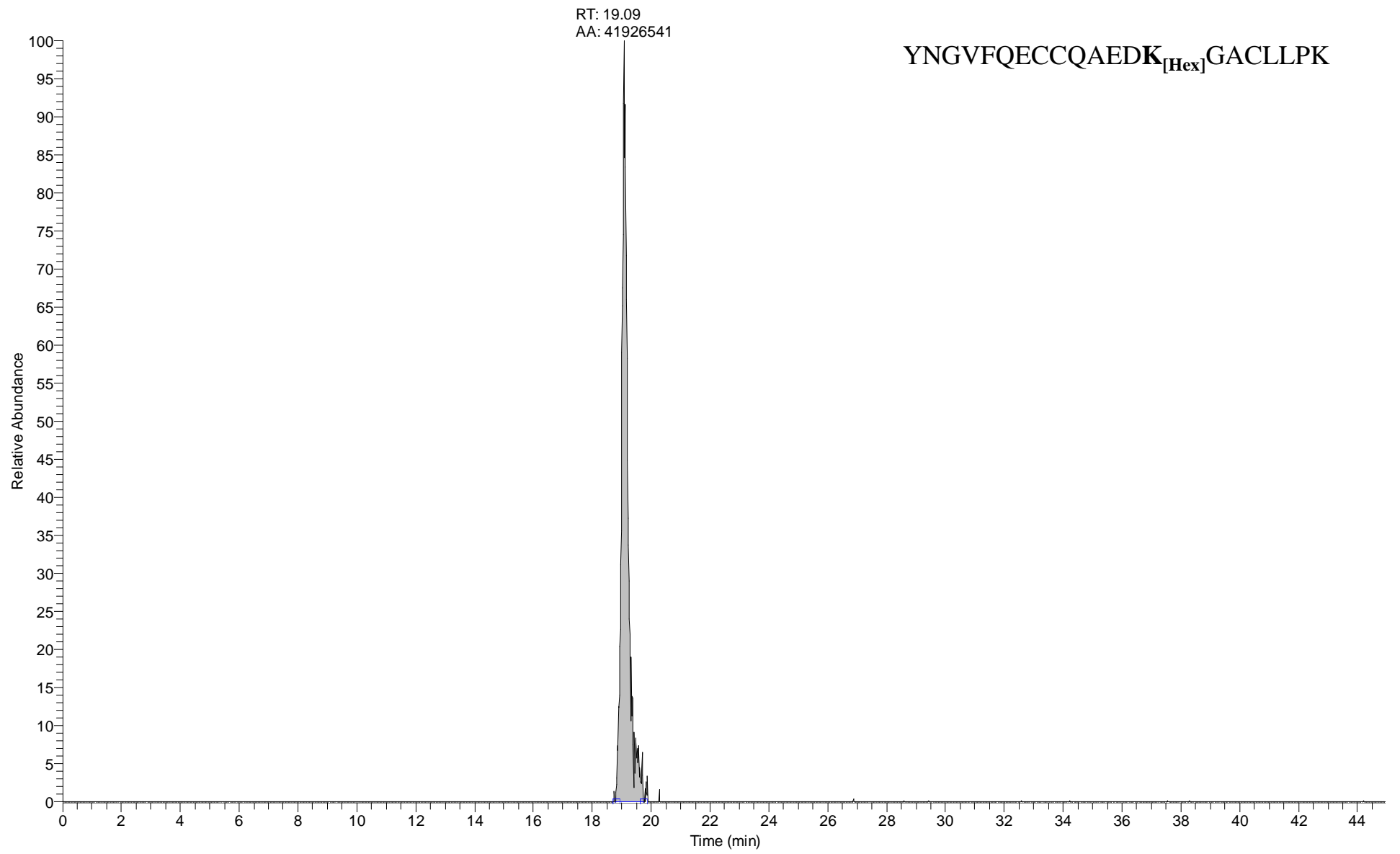


VHK_[Hex]ECCHGDLLECADDRADLAK

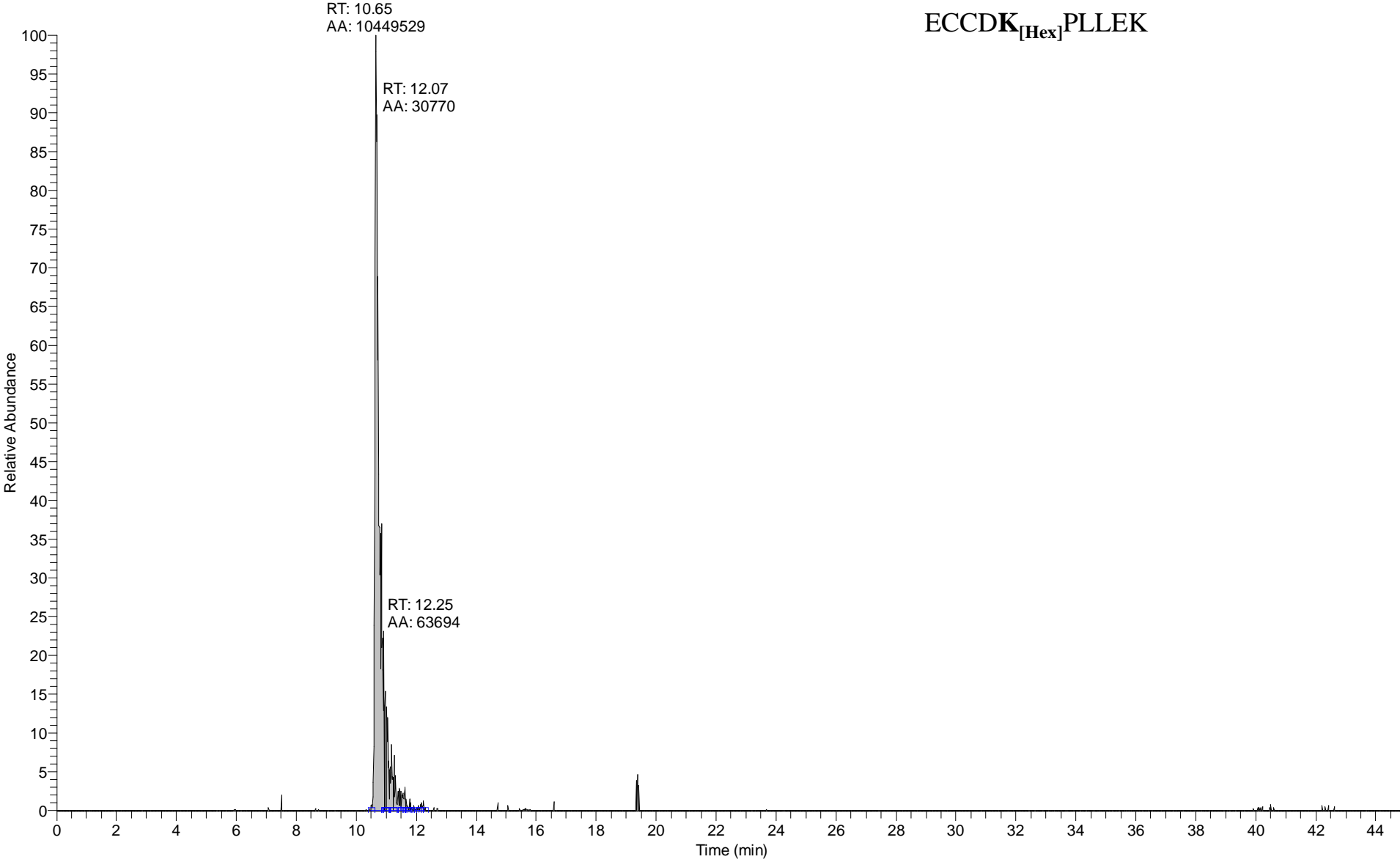


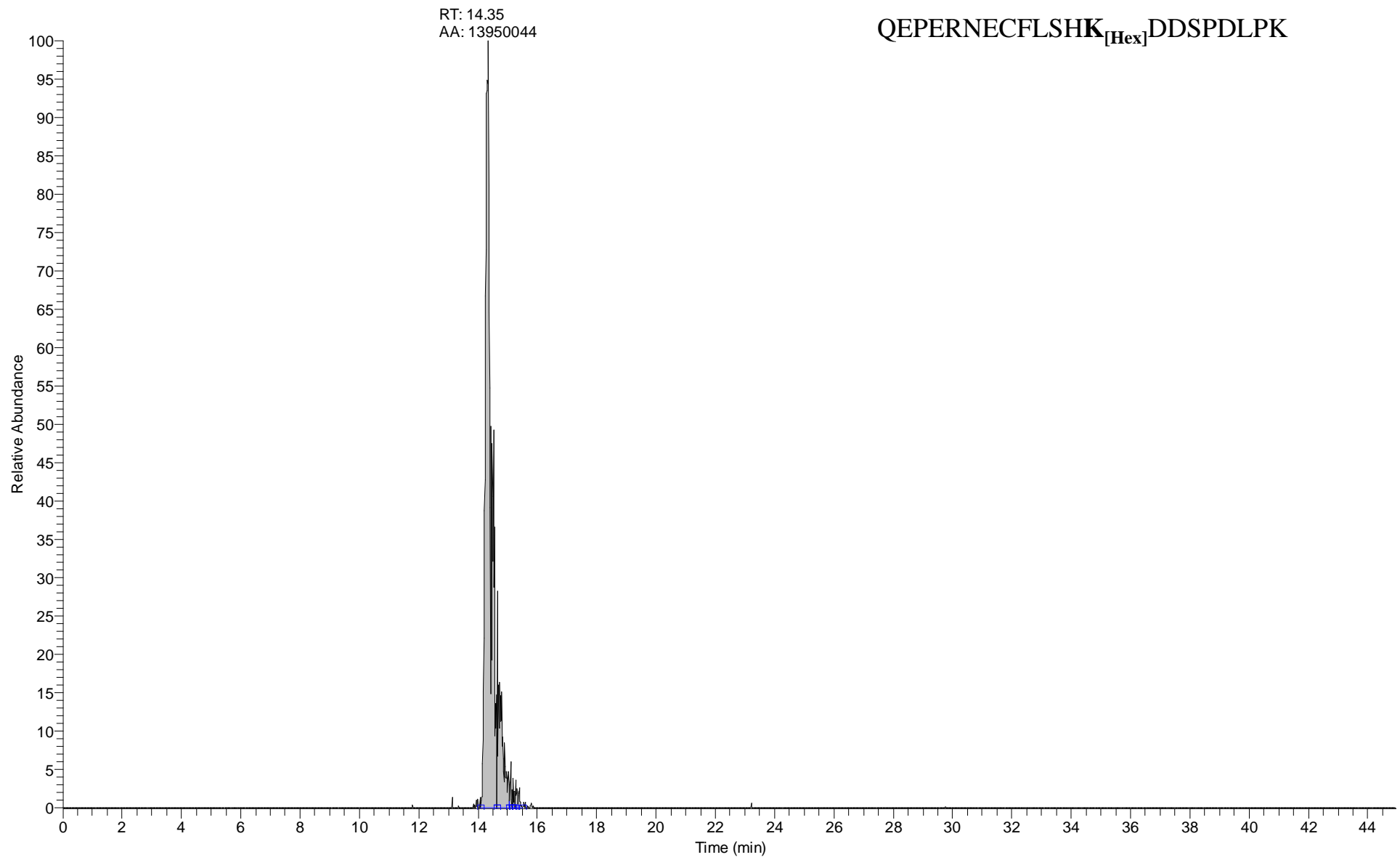
K_[Hex]QTALVELLK

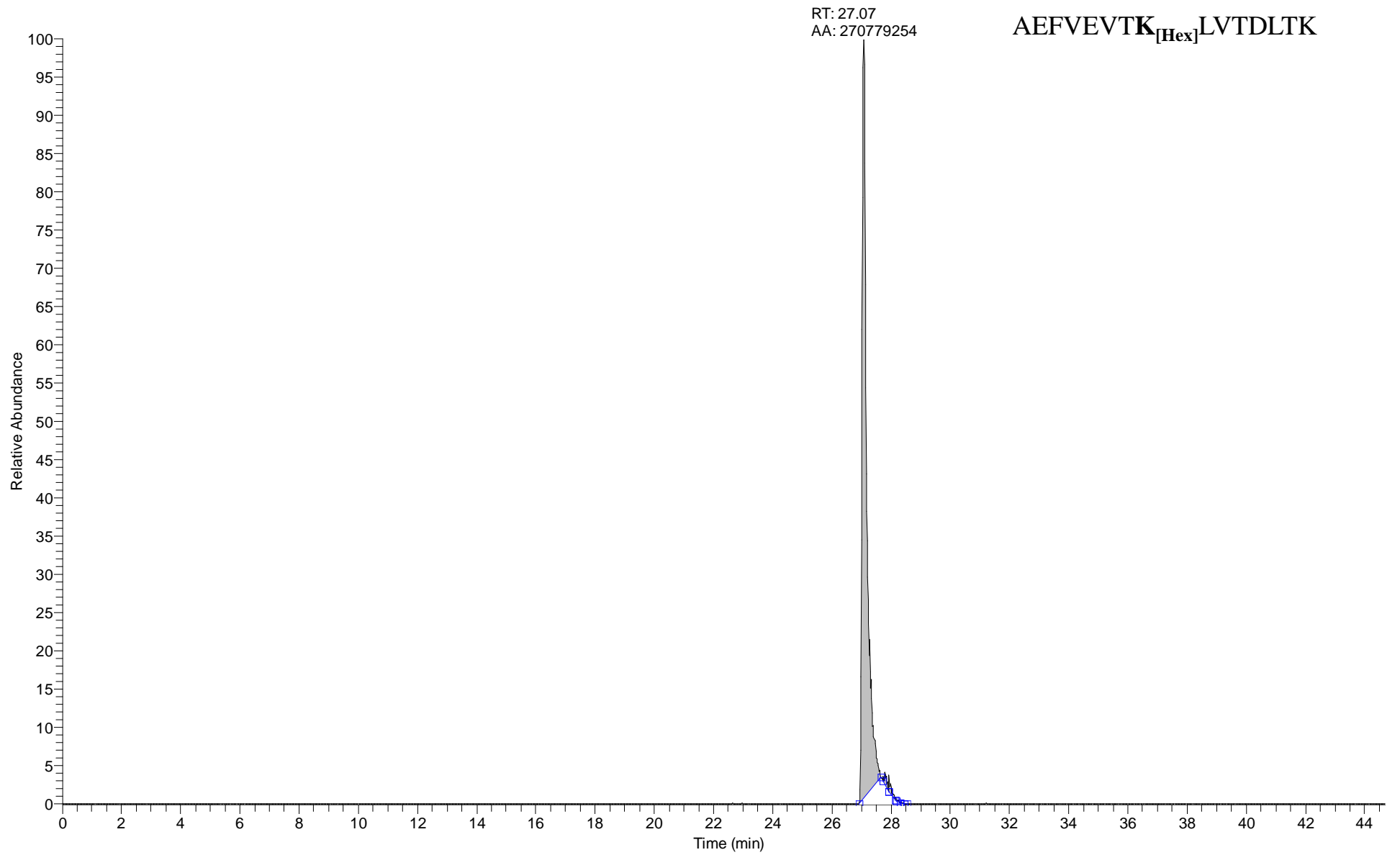




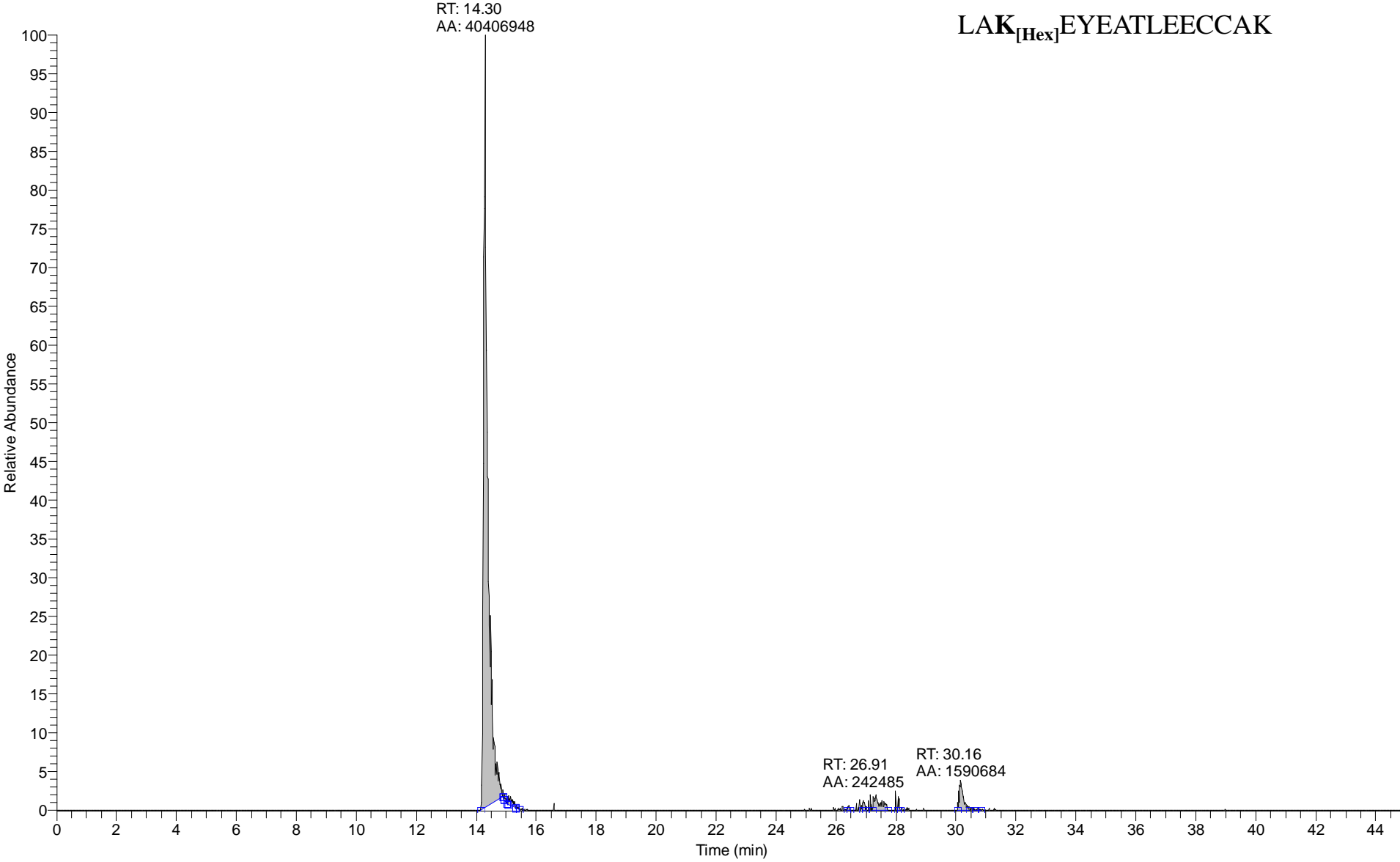
ECCDK_[Hex]PLLEK





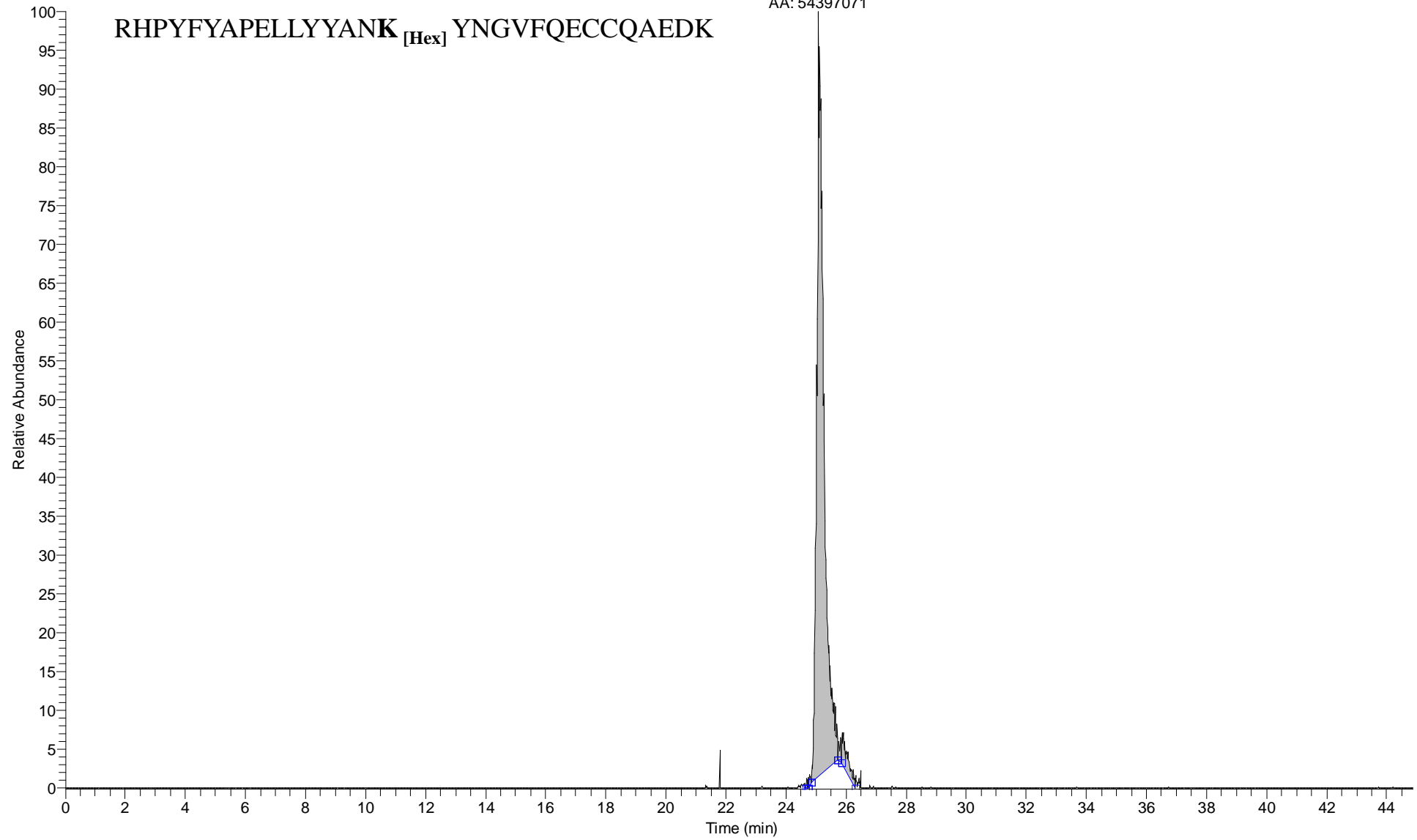


LAK_[Hex]EYEATLEECCA

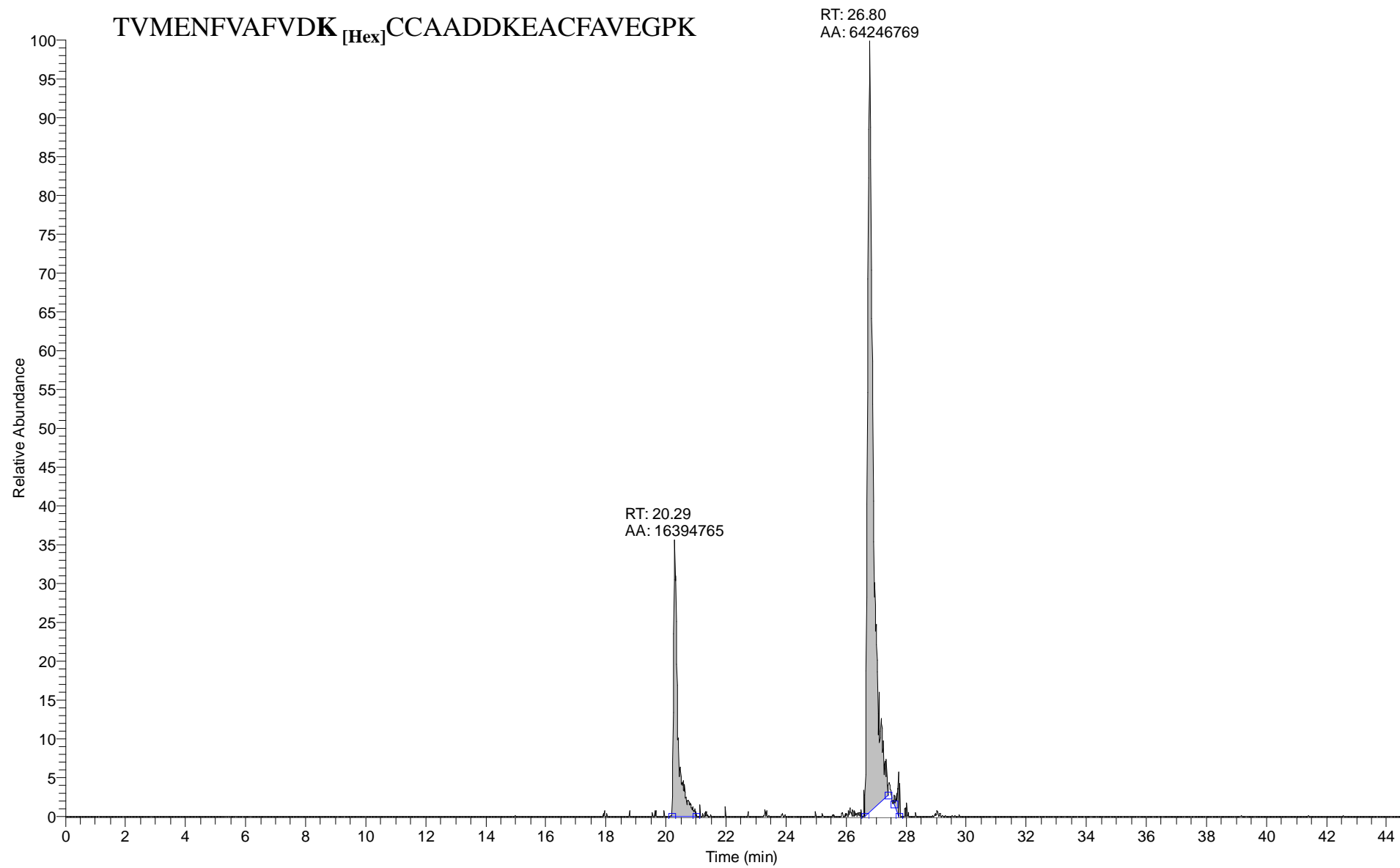


RHPYFYAPELLYYANK [Hex] YNGVFQECCQAEDK

RT: 25.08
AA: 54397071



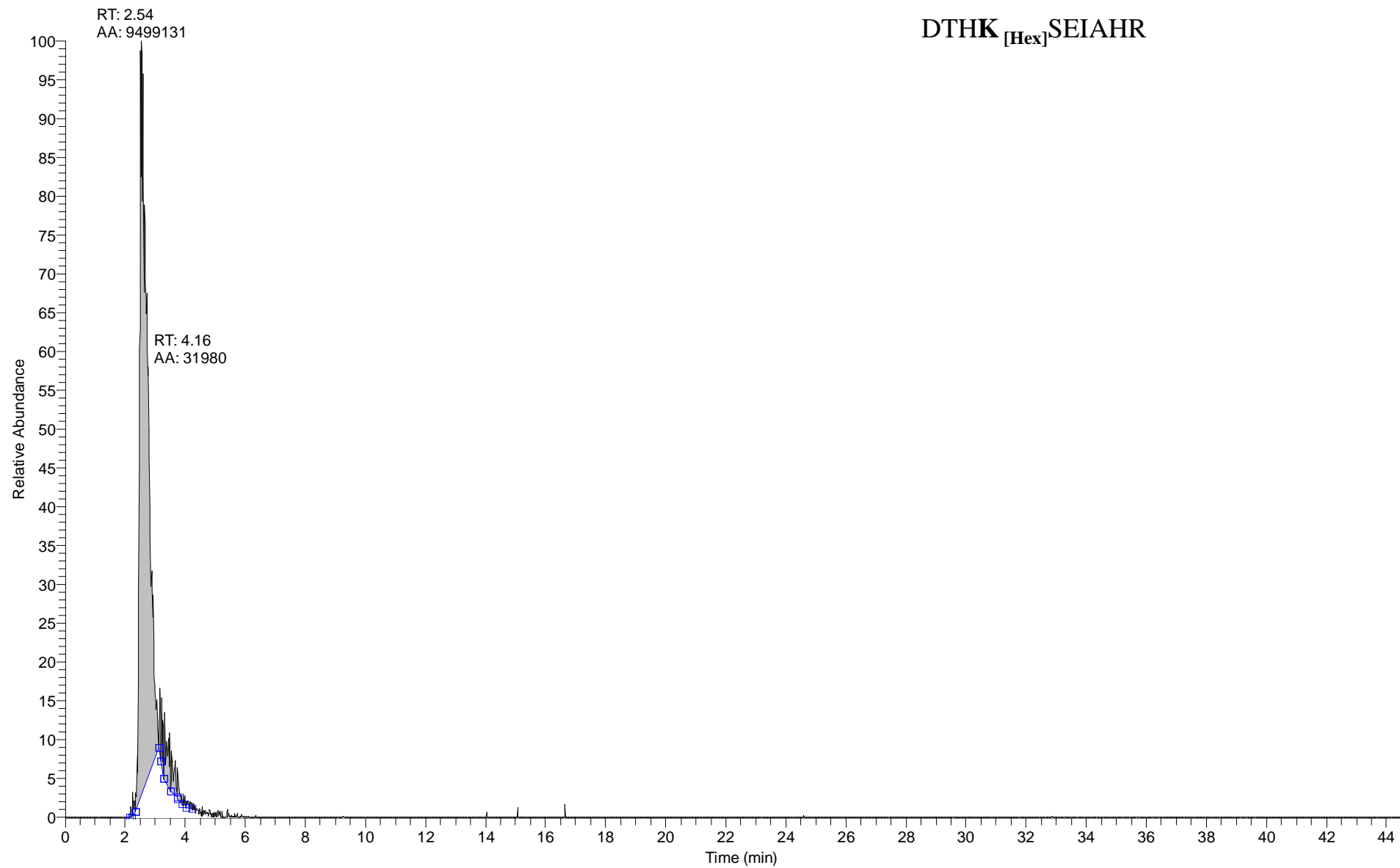
TVMENFVAFVDK [Hex] CCAADDKEACFAVEGPK



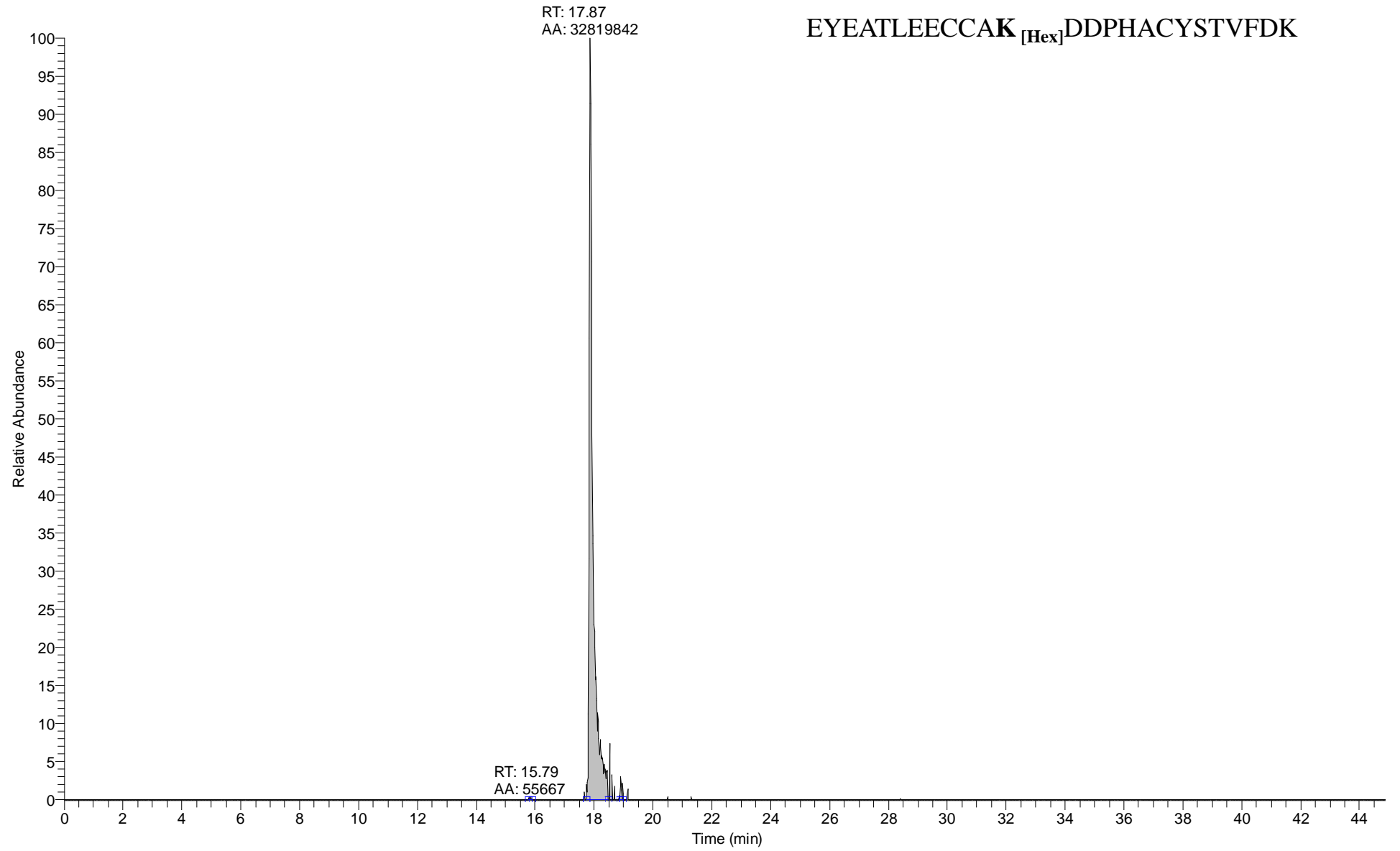
RT: 26.80
AA: 64246769

RT: 20.29
AA: 16394765

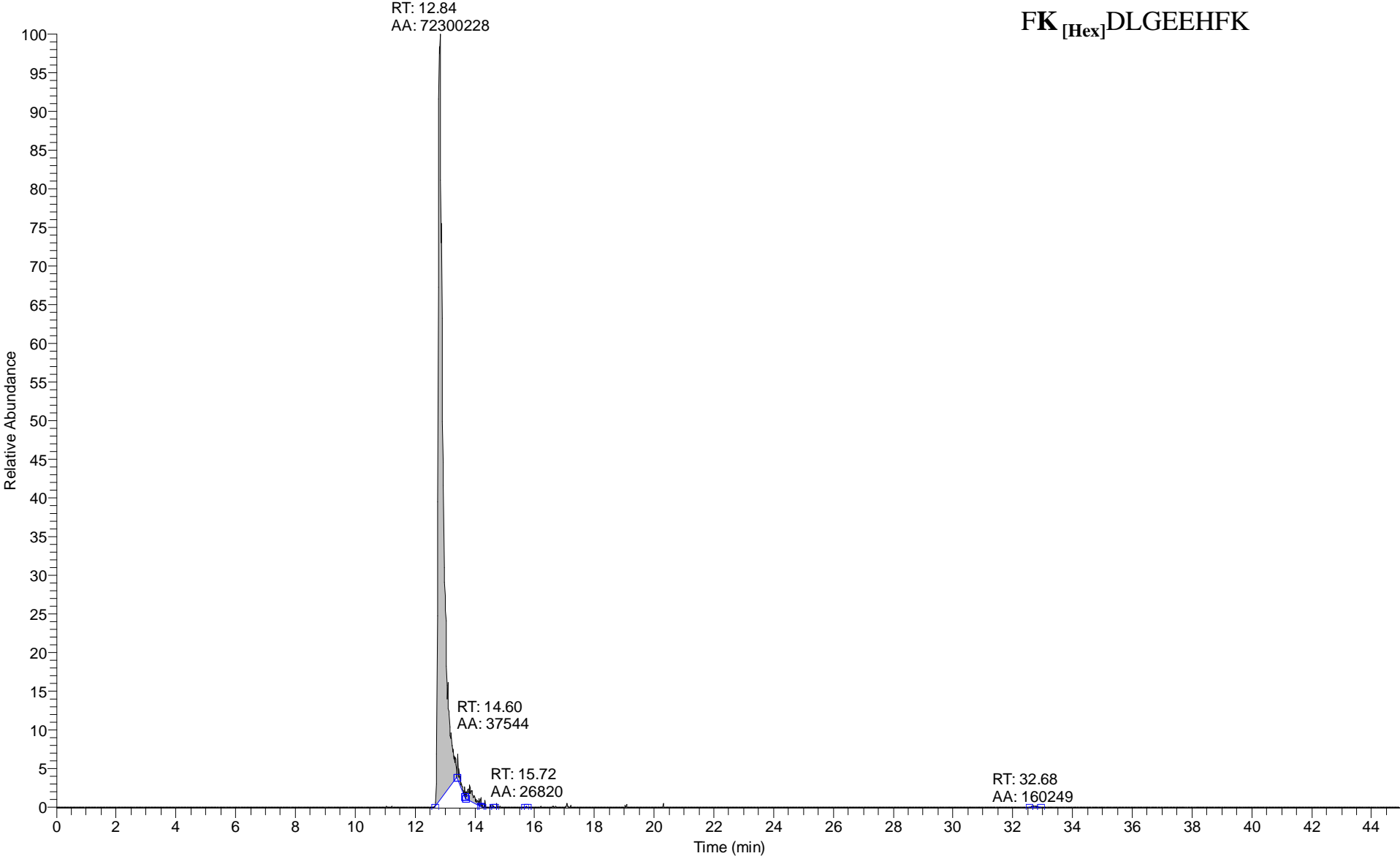
DTHK_[Hex]SEIAHR

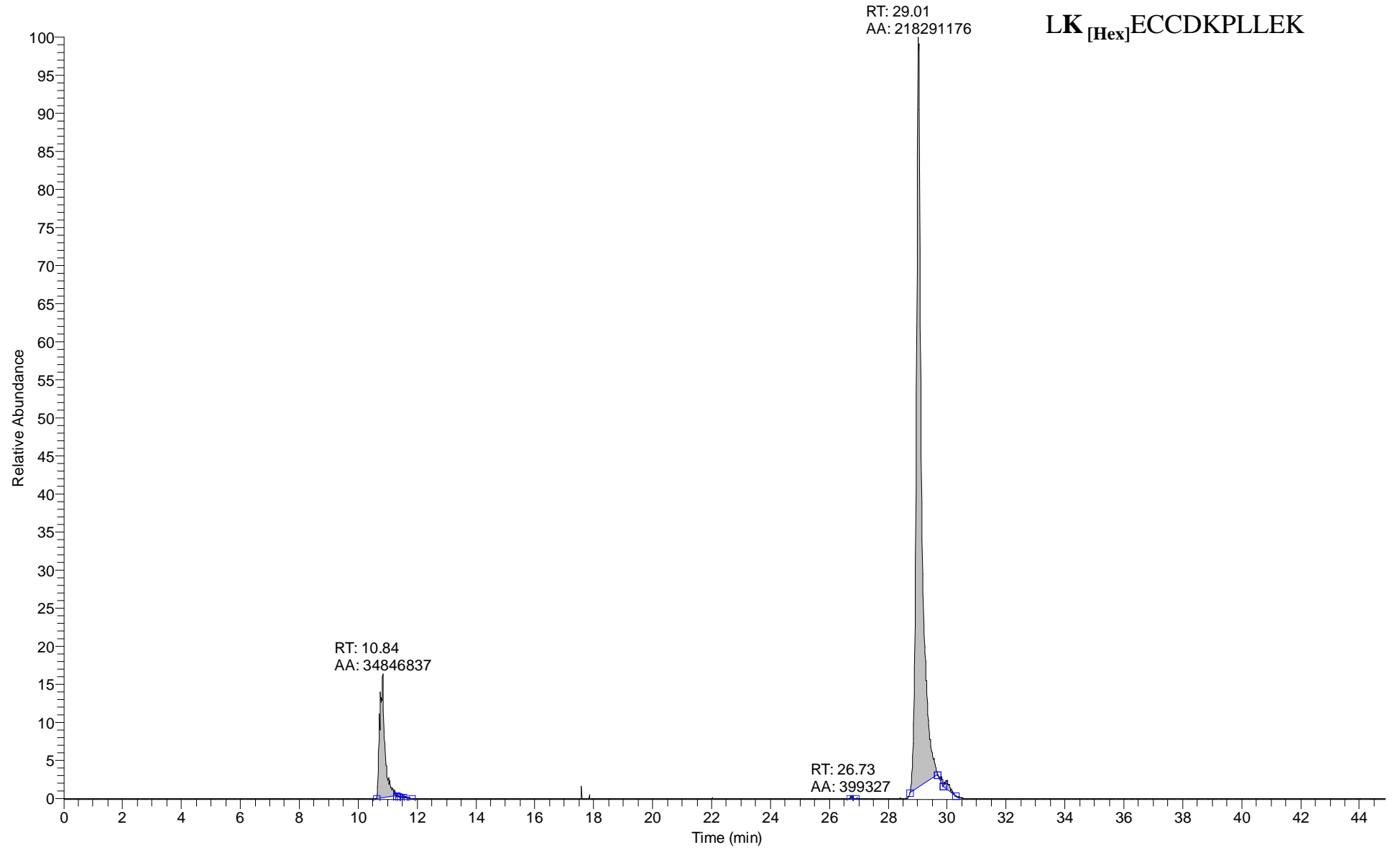


EYEATLEECCA**K** [Hex]DDPHACYSTVFDK



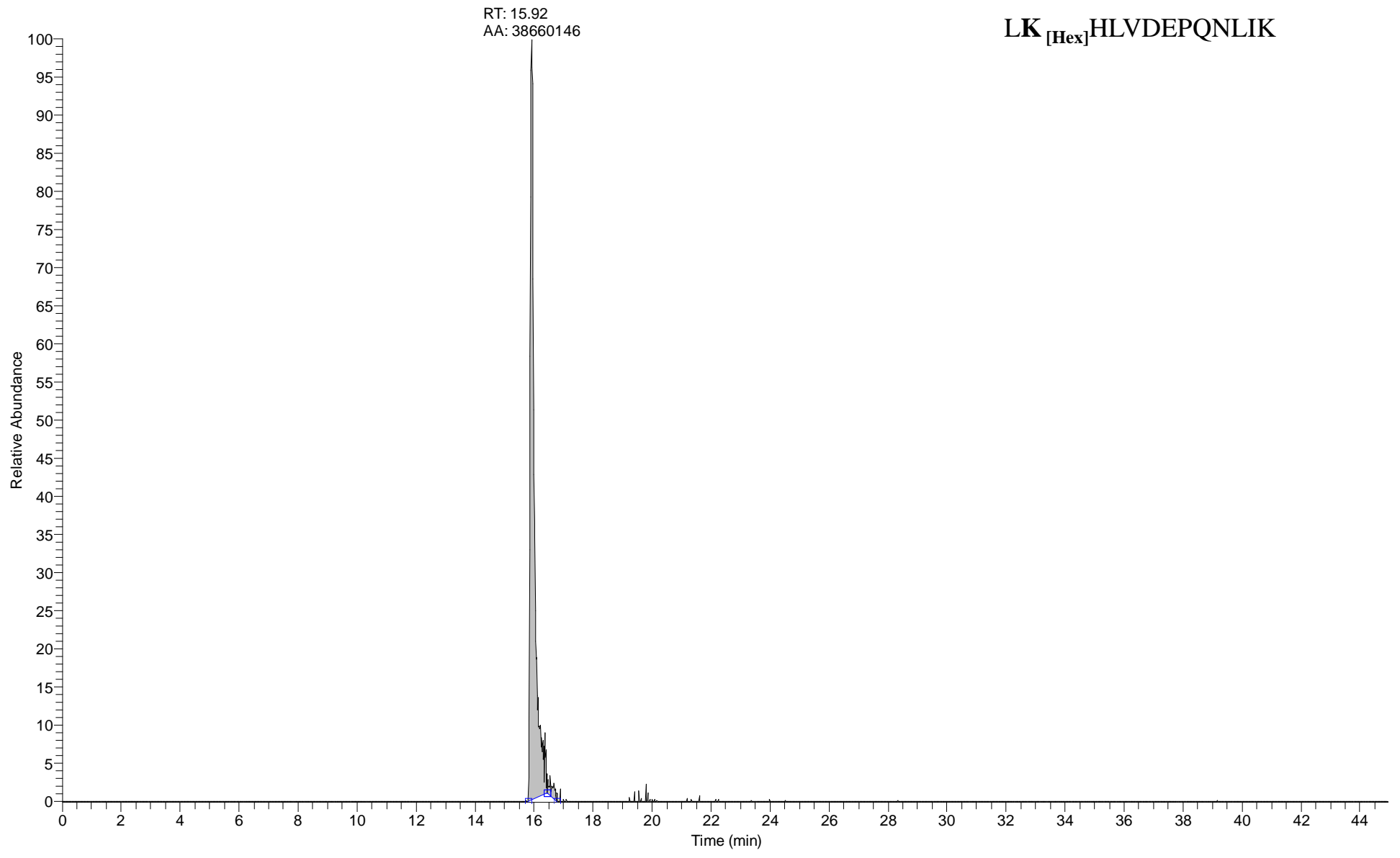
FK_[Hex]DLGEEHFK

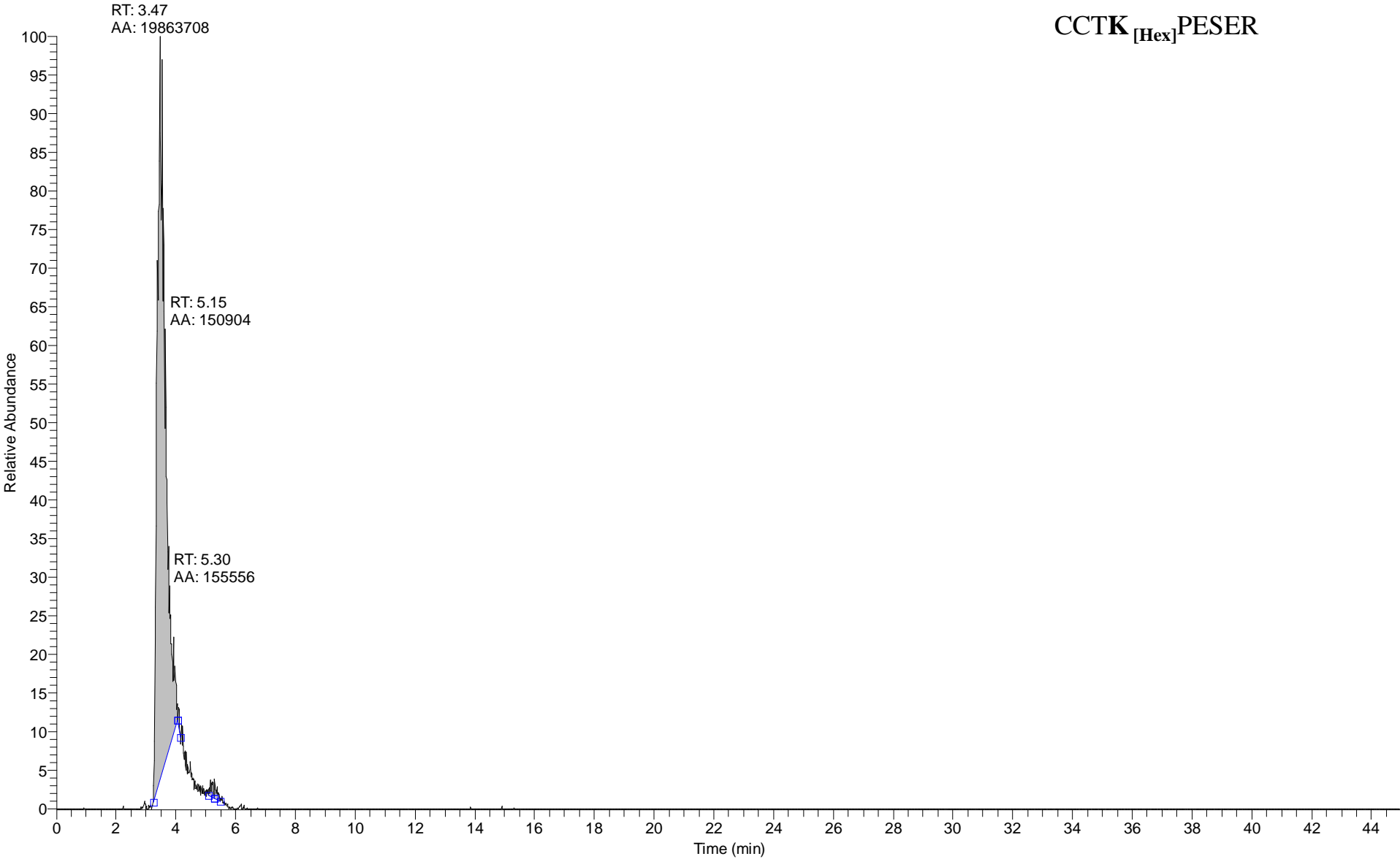




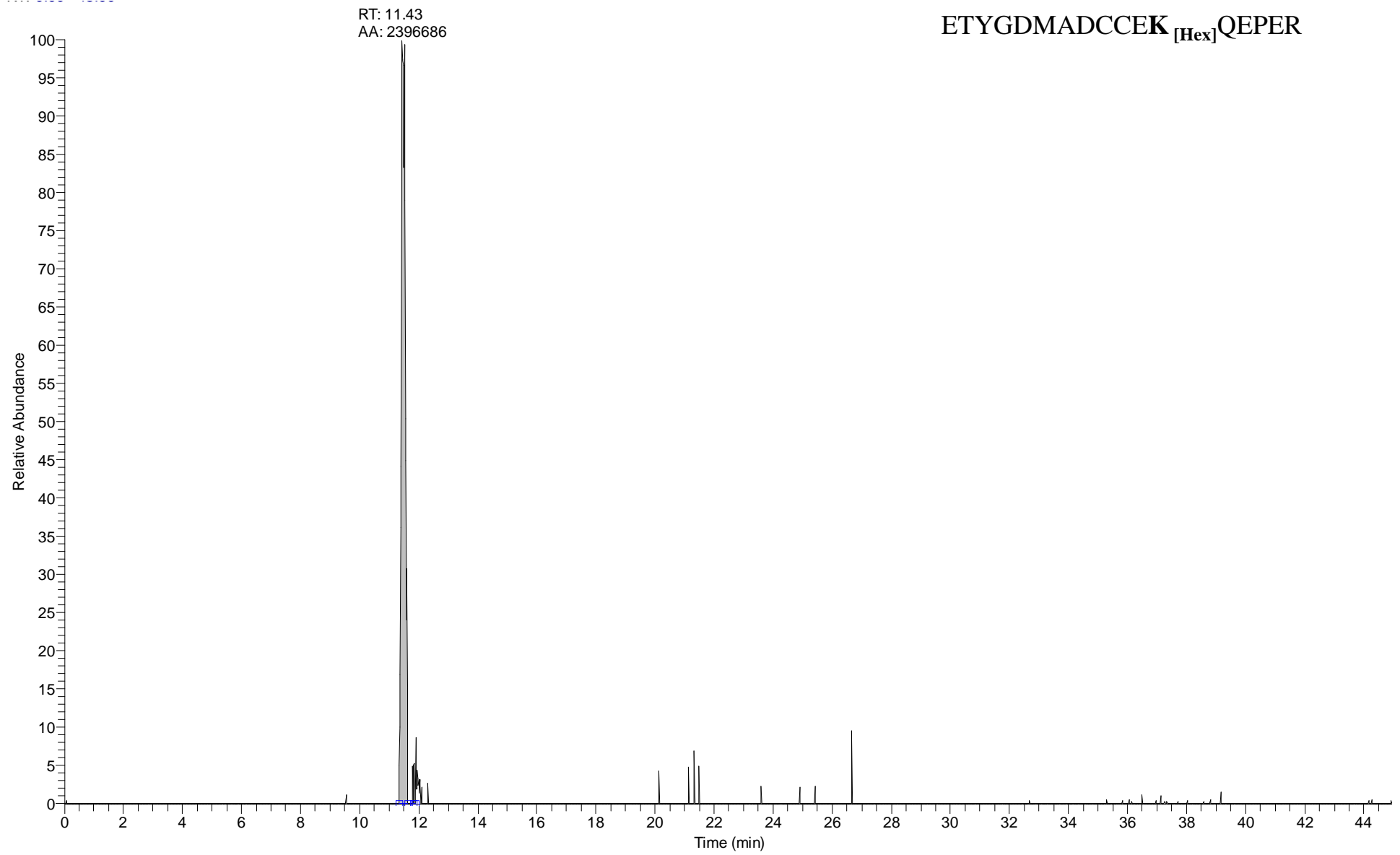
LK_[Hex]ECCKPLLEK

LK_[Hex]HLVDEPQNLIK

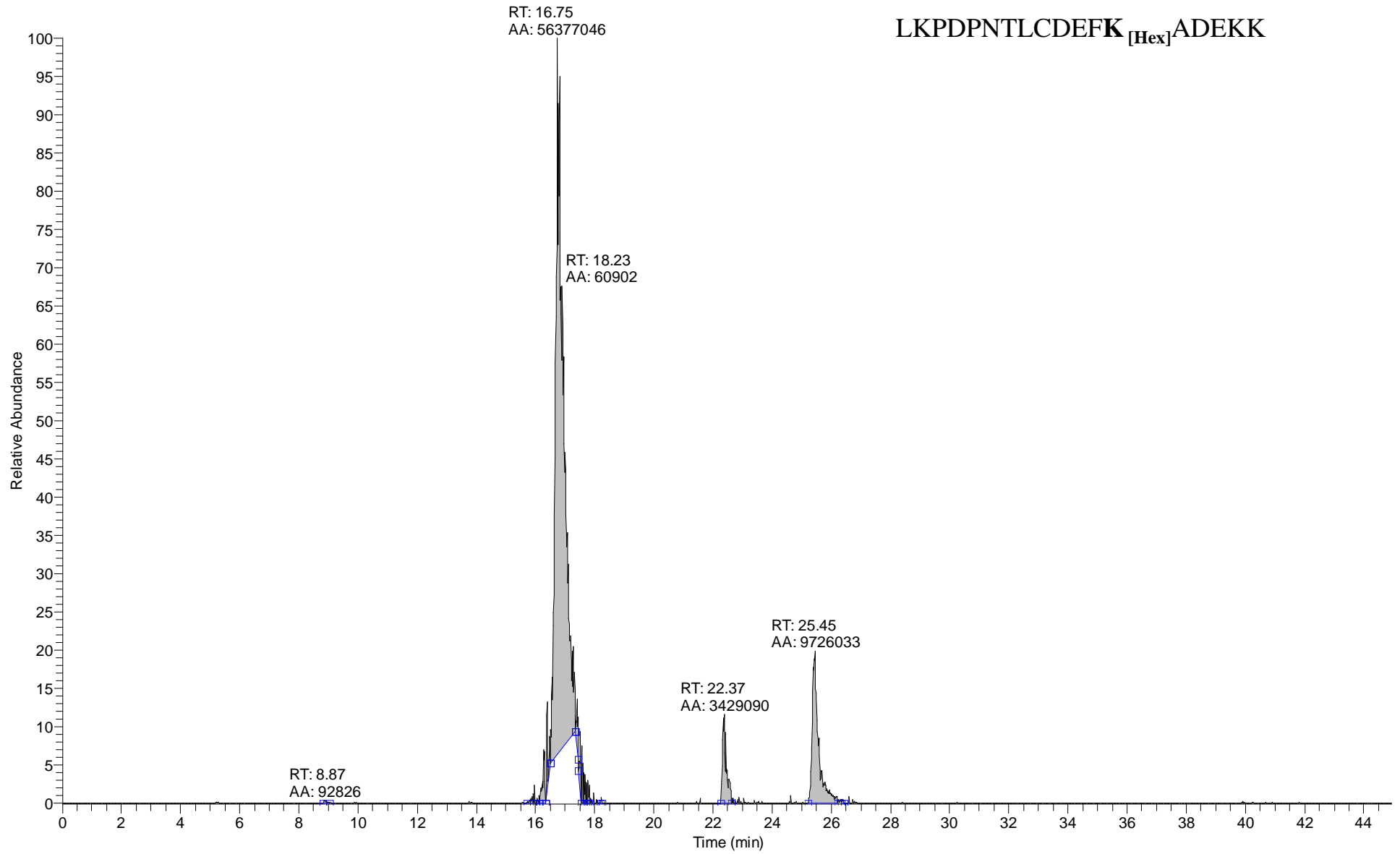




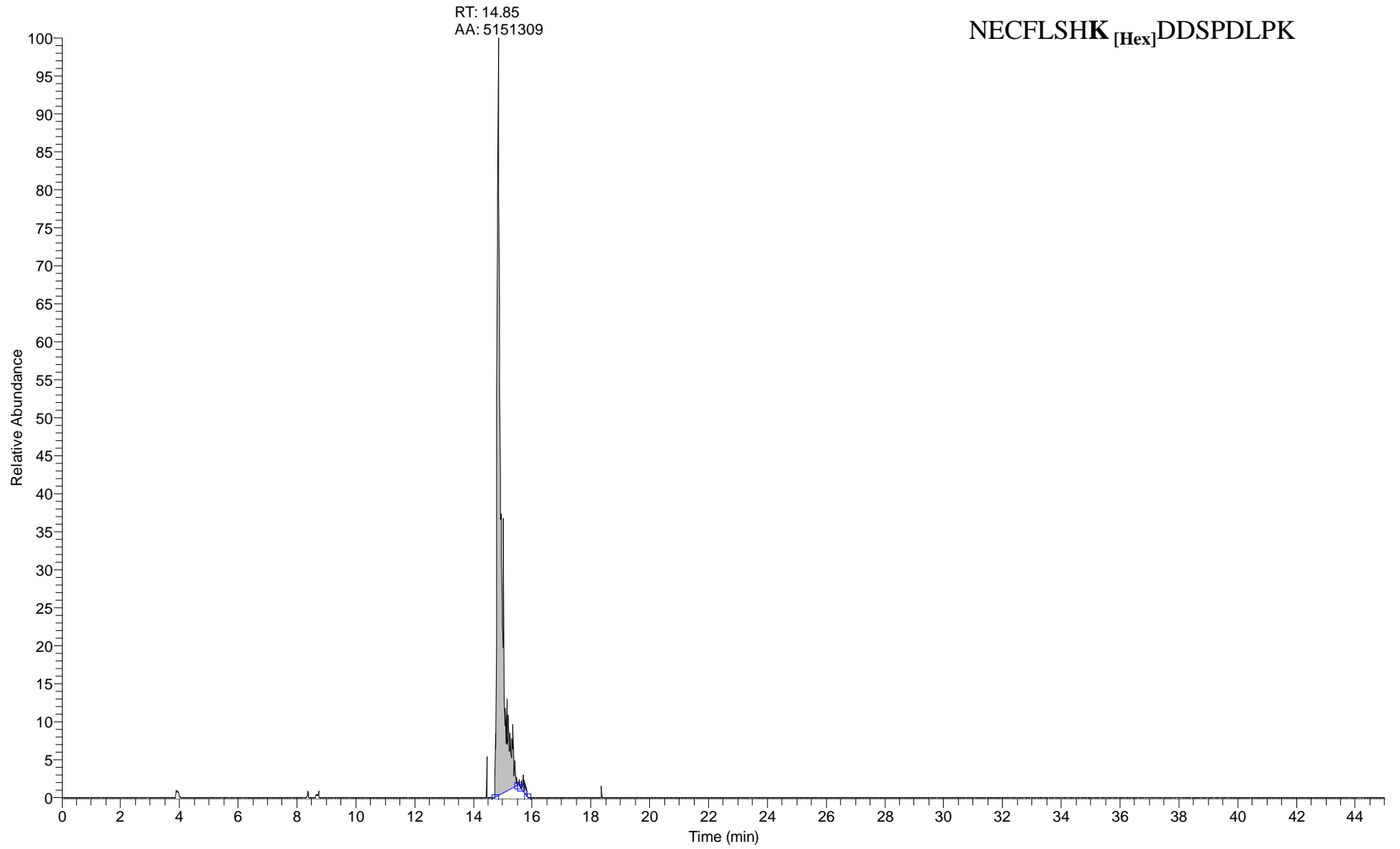
ETYGDMADCCEK_[Hex]QEPER



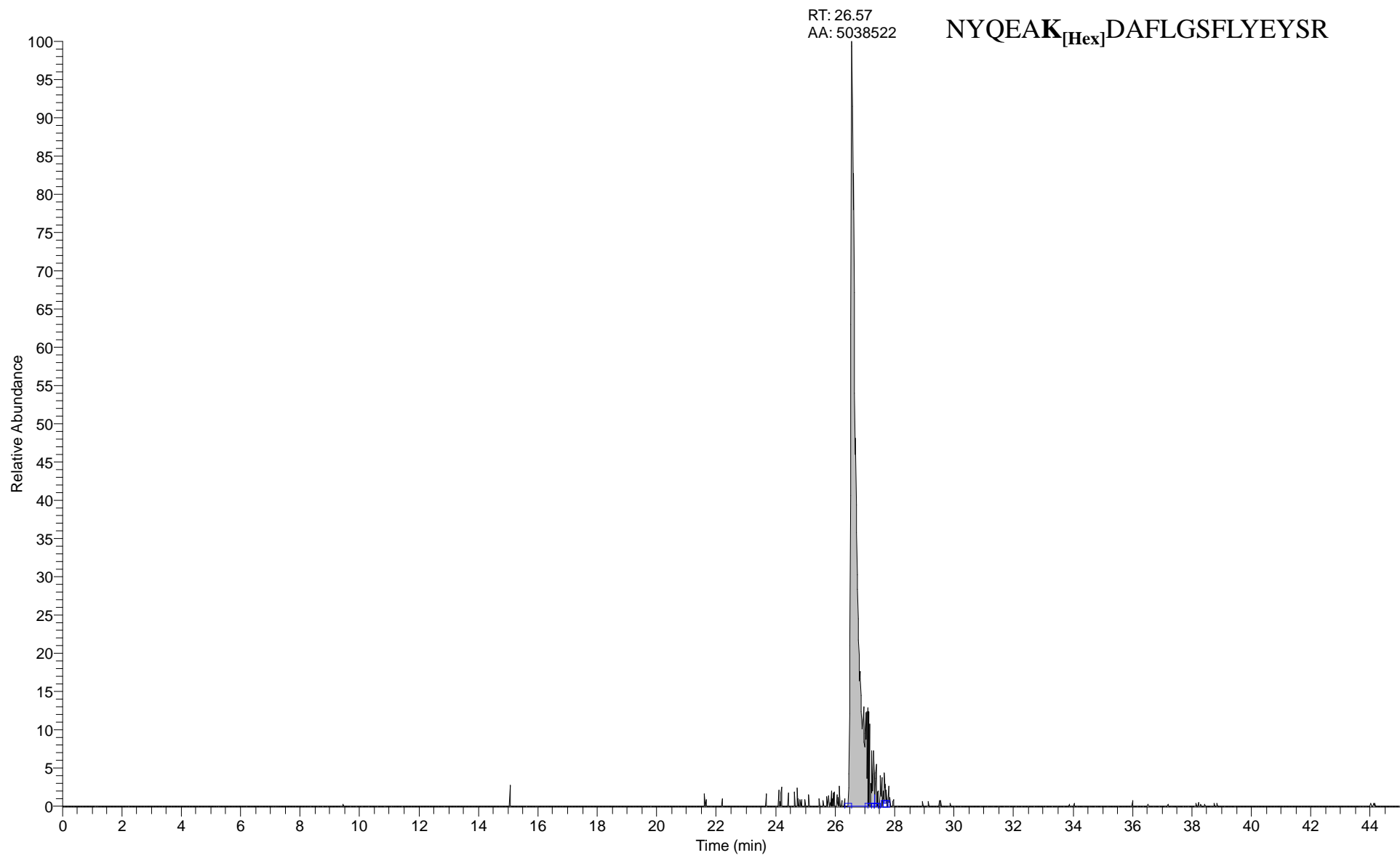
LKPDPNTLCDEFK_[Hex]ADEKK



NECFLSHK_[Hex]DDSPDLPK

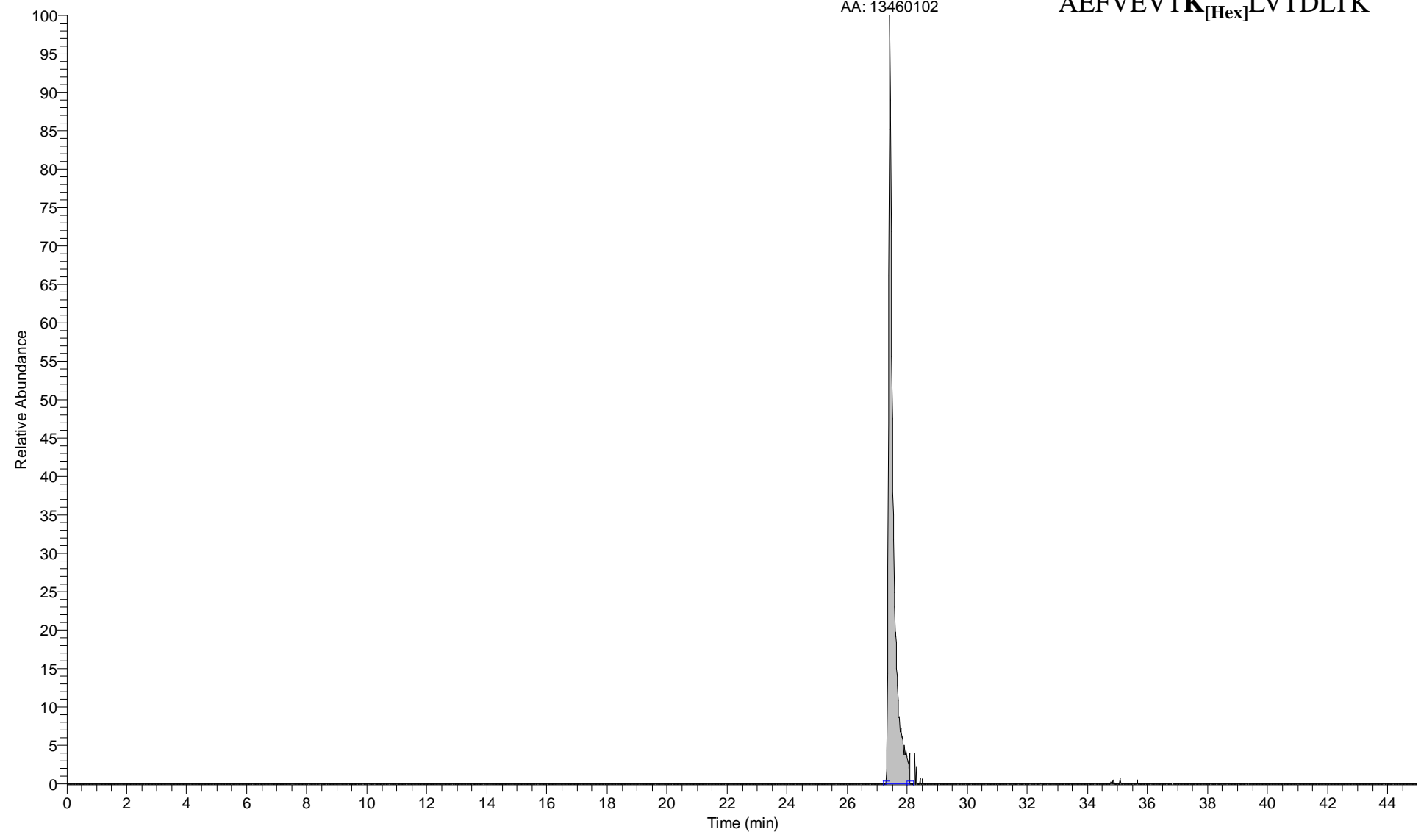


**Glycated modified peptides of BSA treated with Isoprenaline –
XIC's**

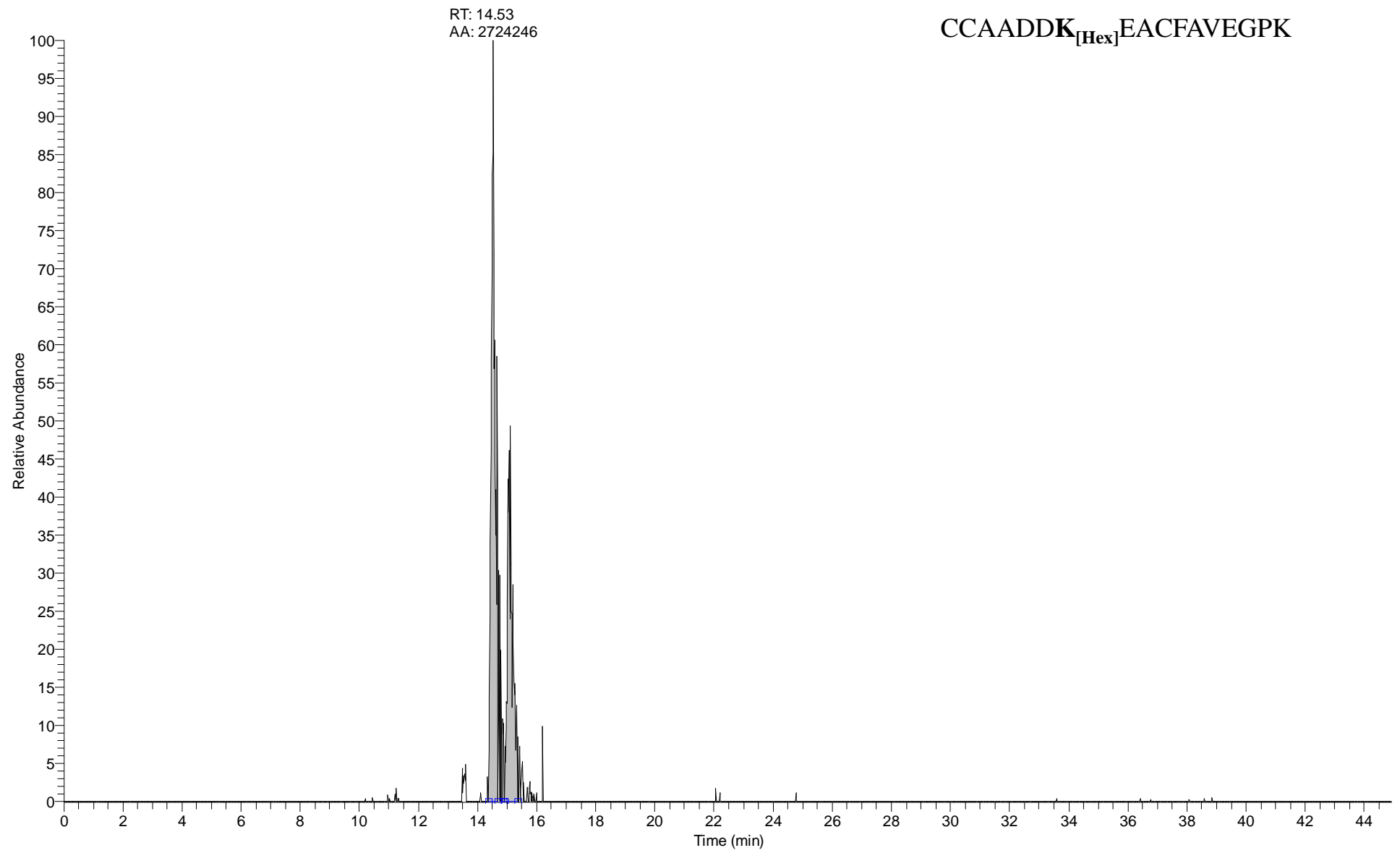


AEFVEVTK_[Hex]LVTDLTK

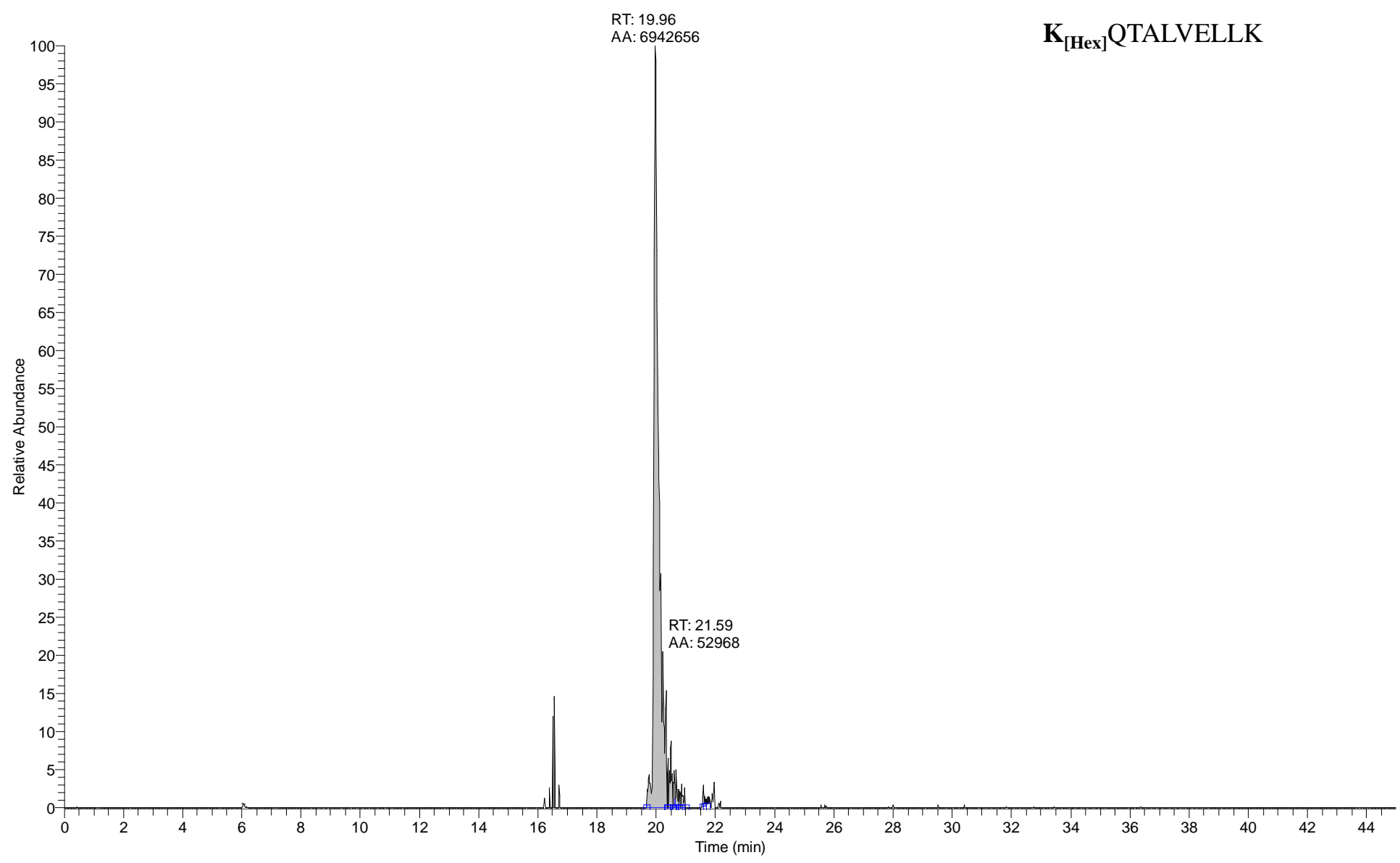
RT: 27.42
AA: 13460102

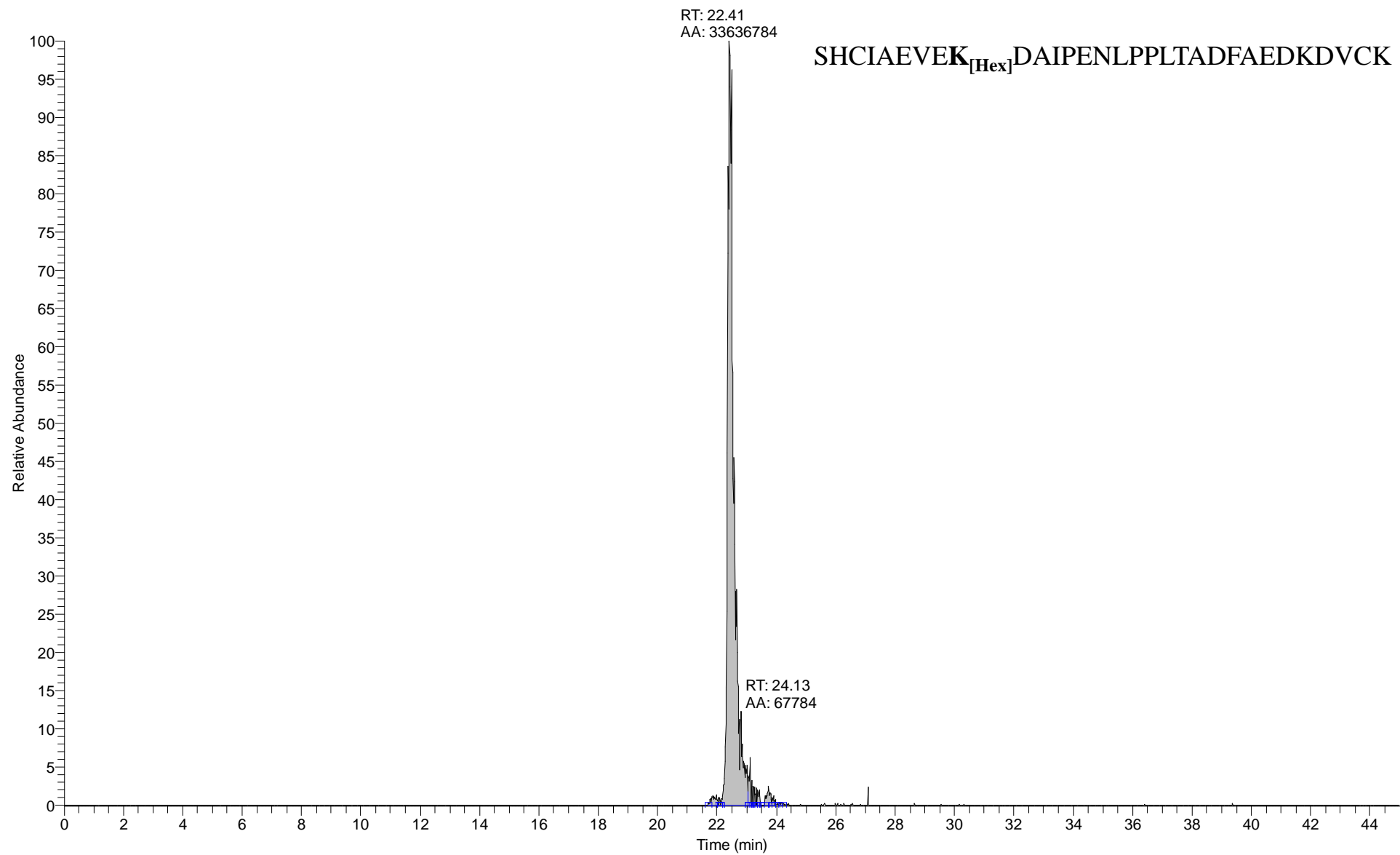


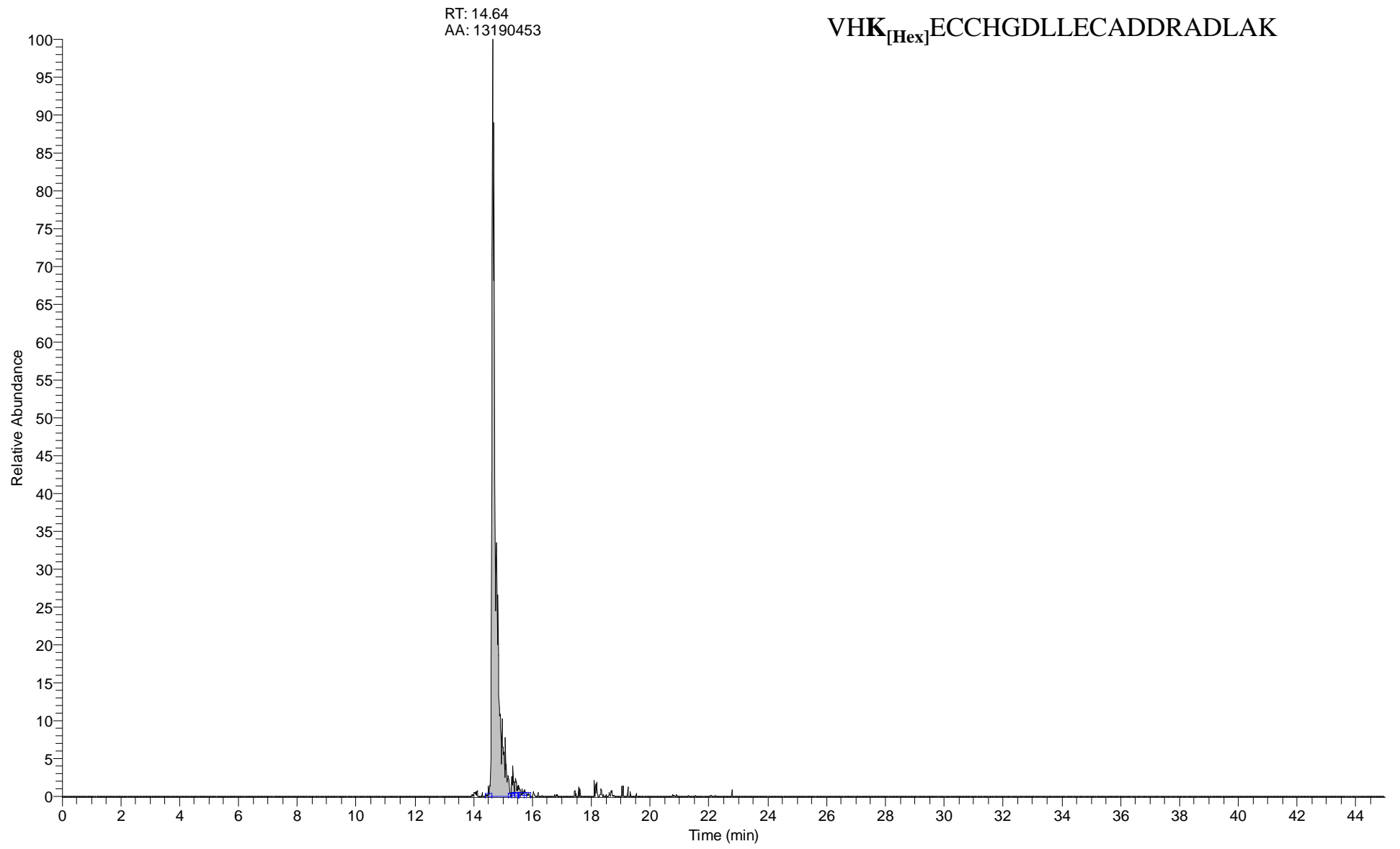
CCAADDK_[Hex]EACFAVEGPK



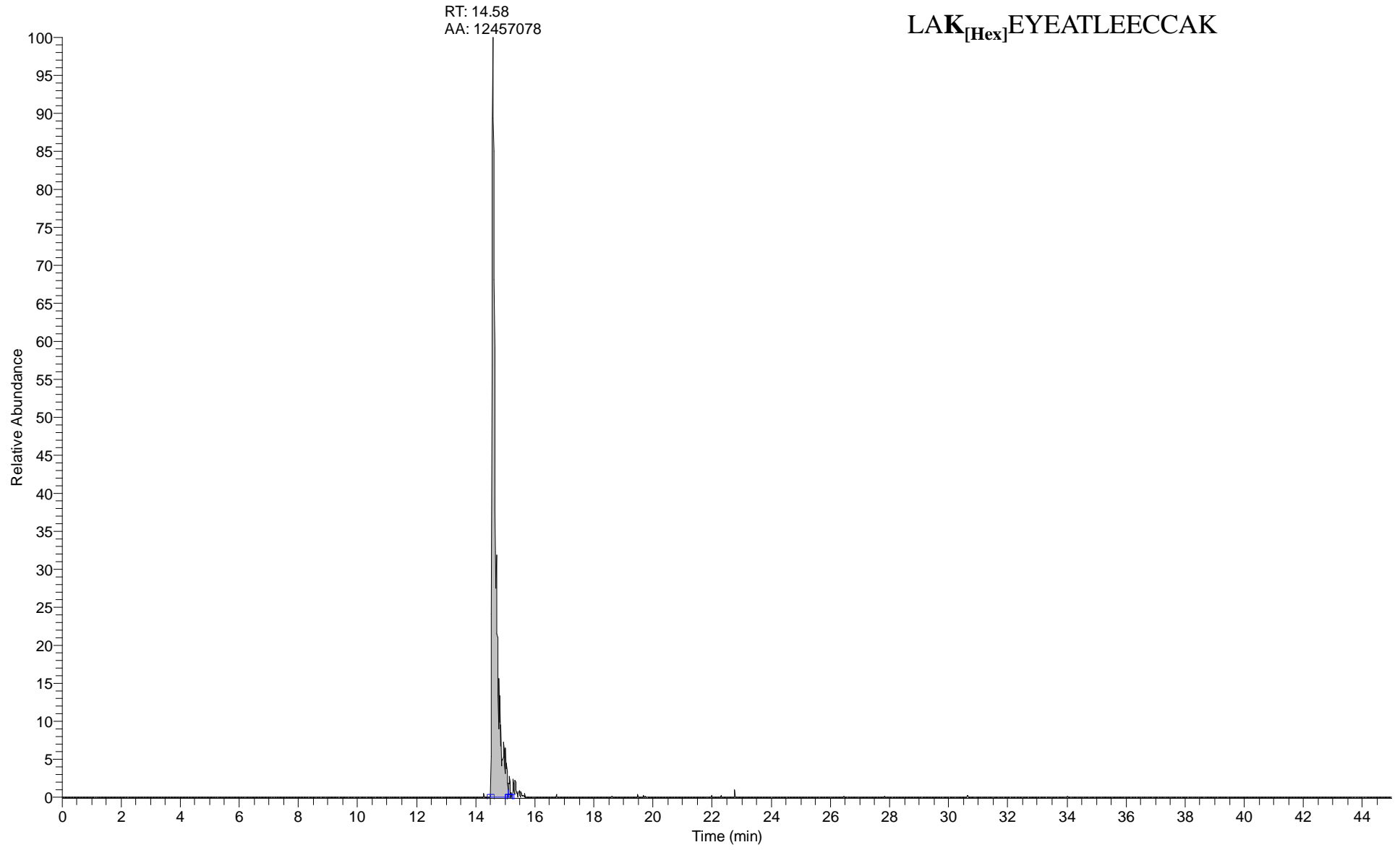
K_[Hex]QTALVELLK

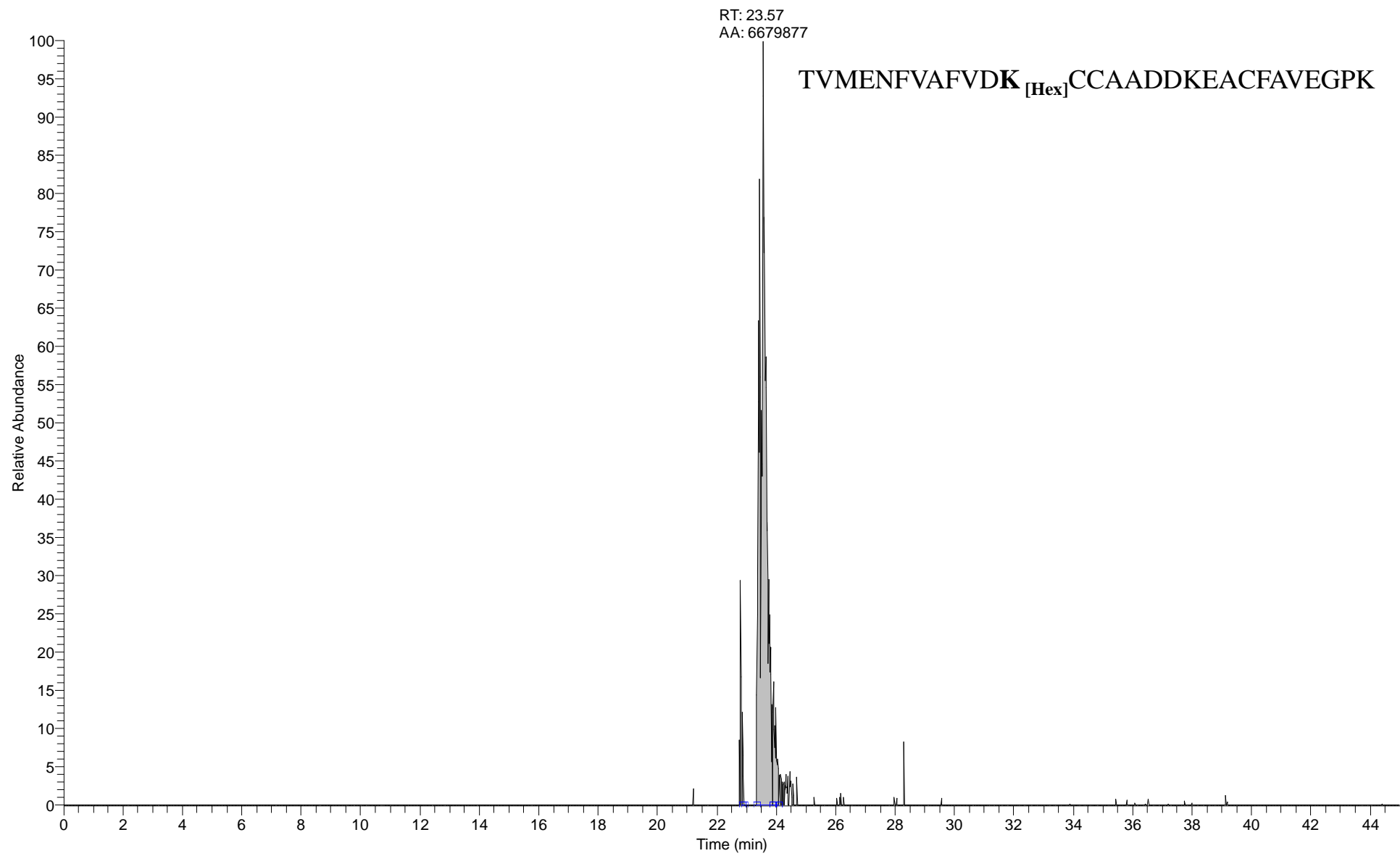


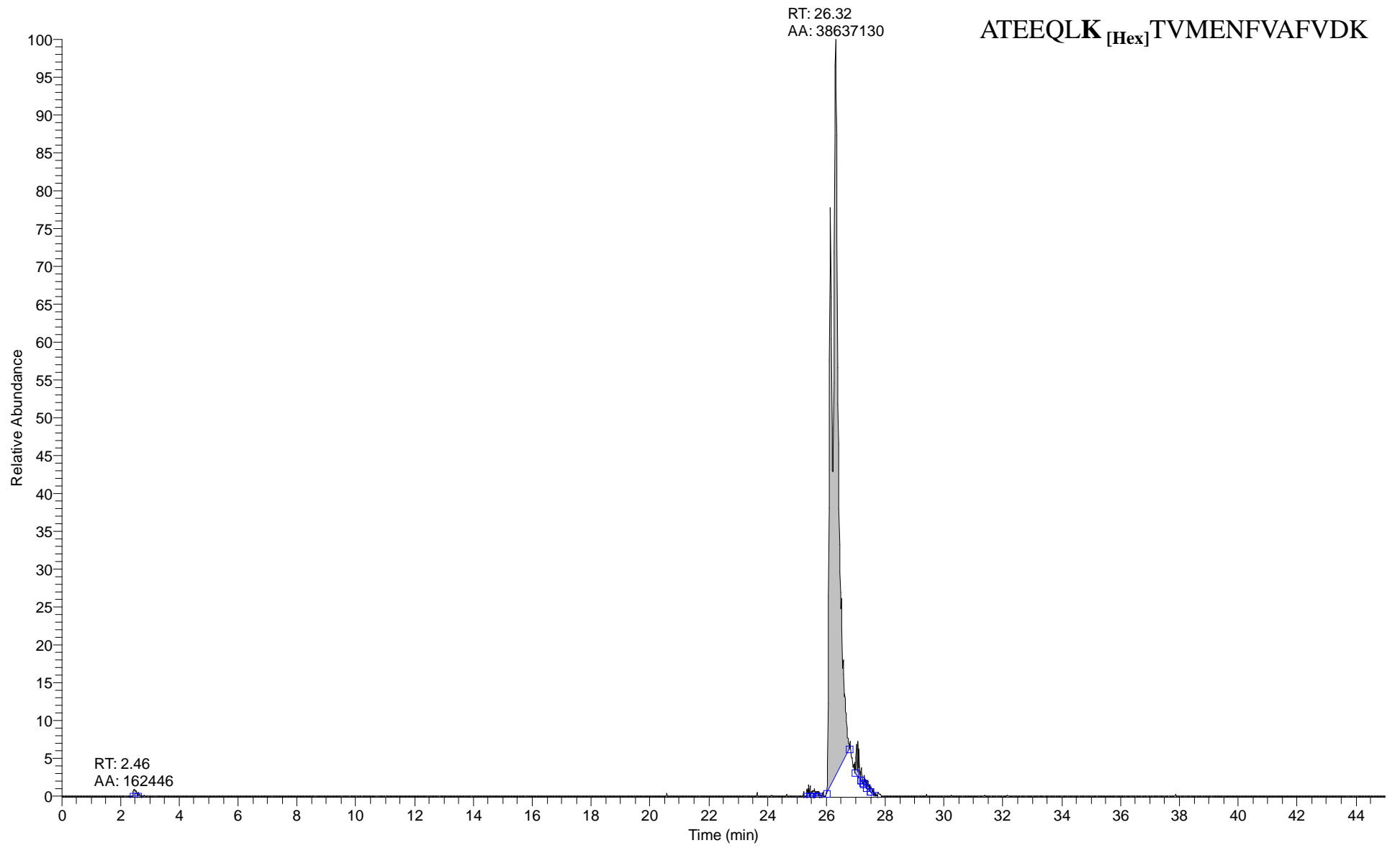




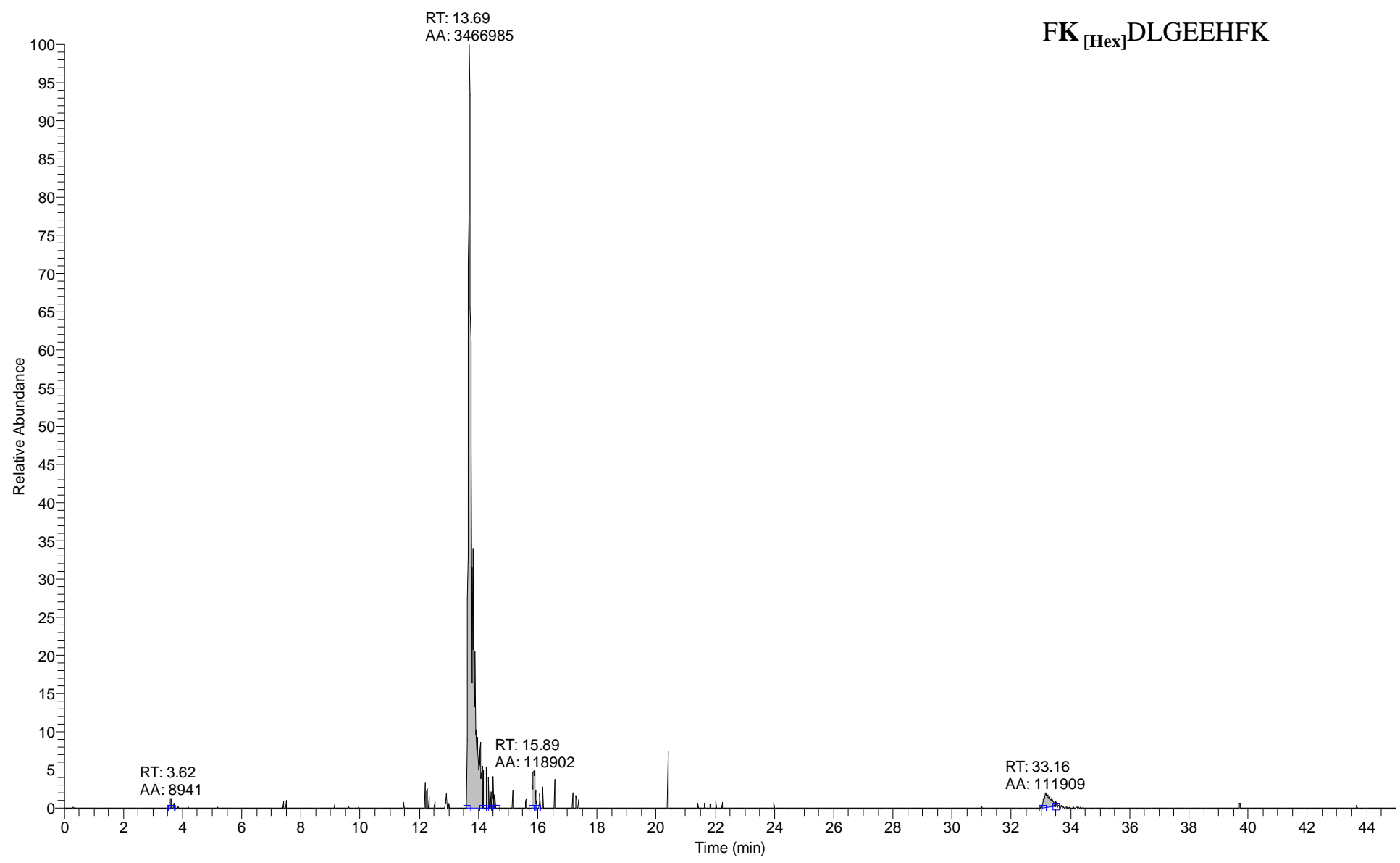
LAK_[Hex]EYEATLEECCA



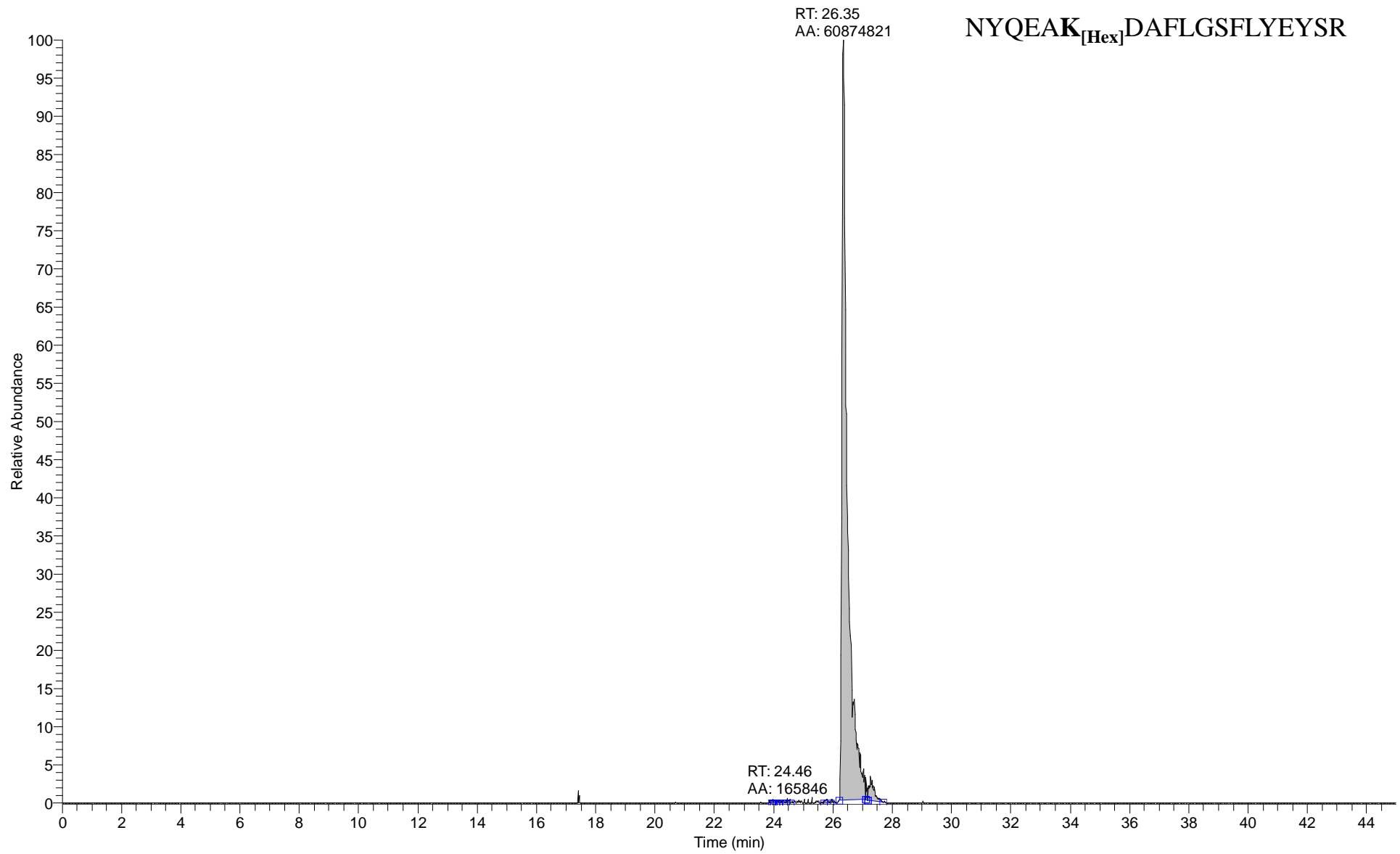




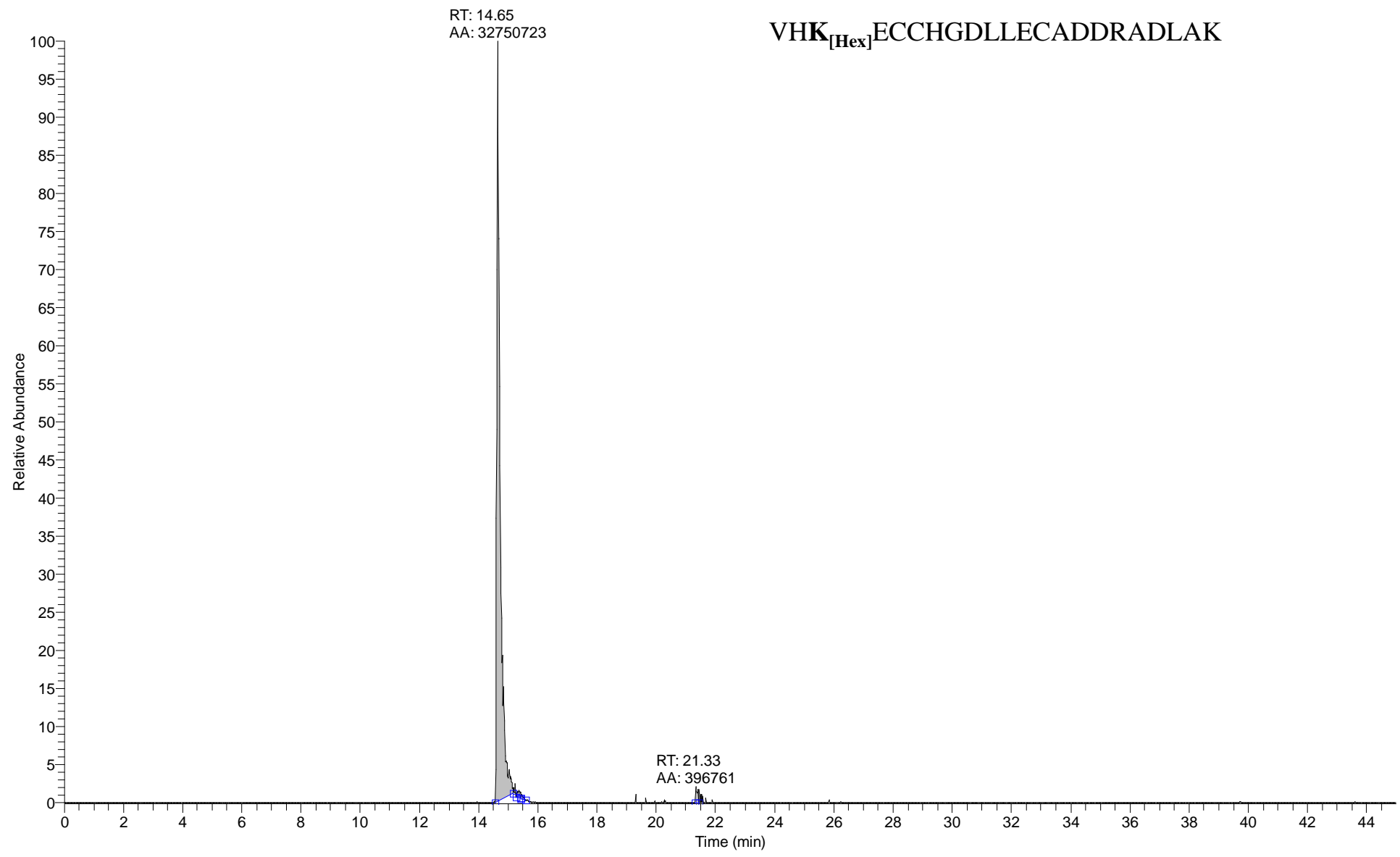
FK_[Hex]DLGEEHFK

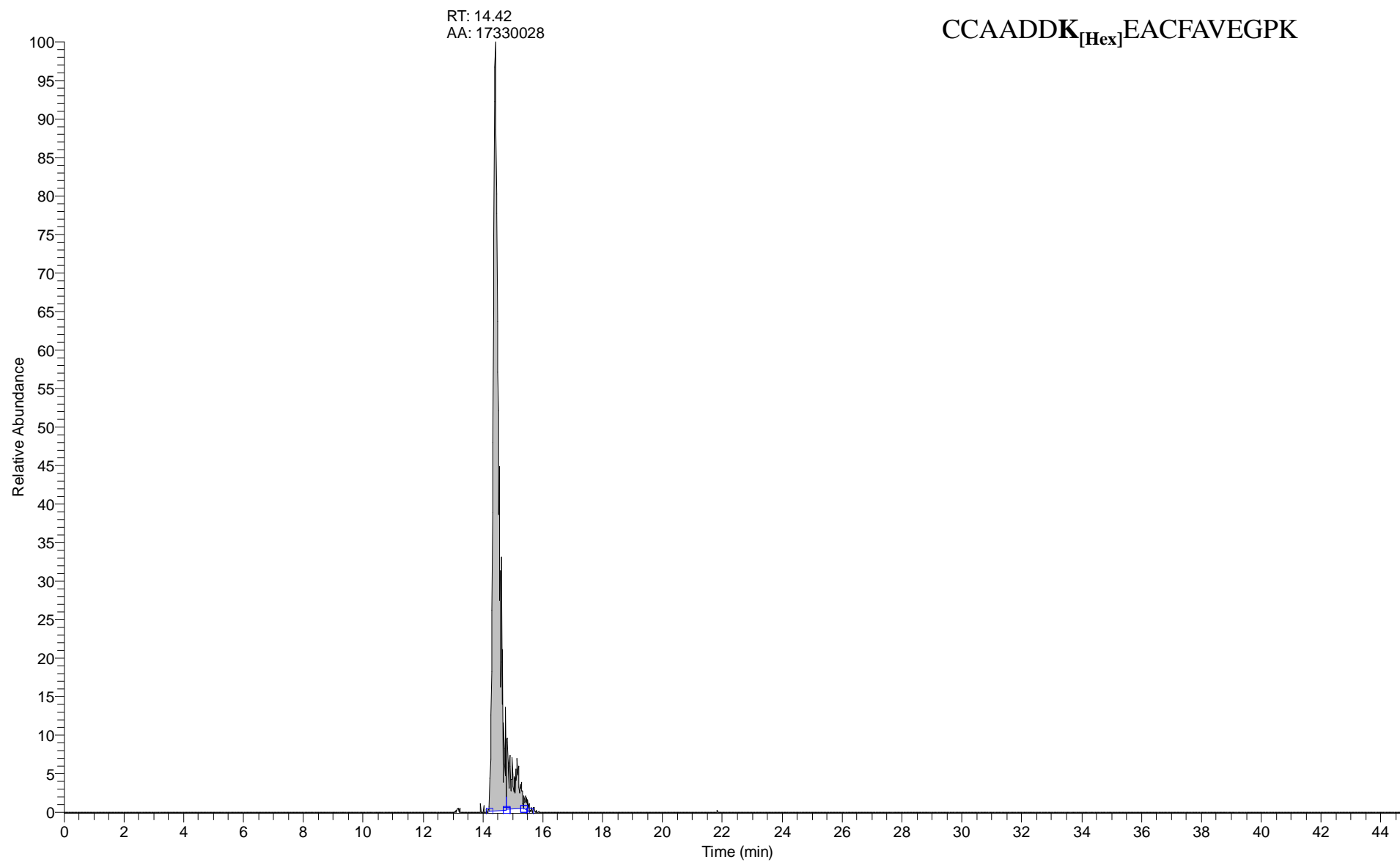


**Glycated modified peptides of BSA treated with Aminoguanidine
– XIC's**

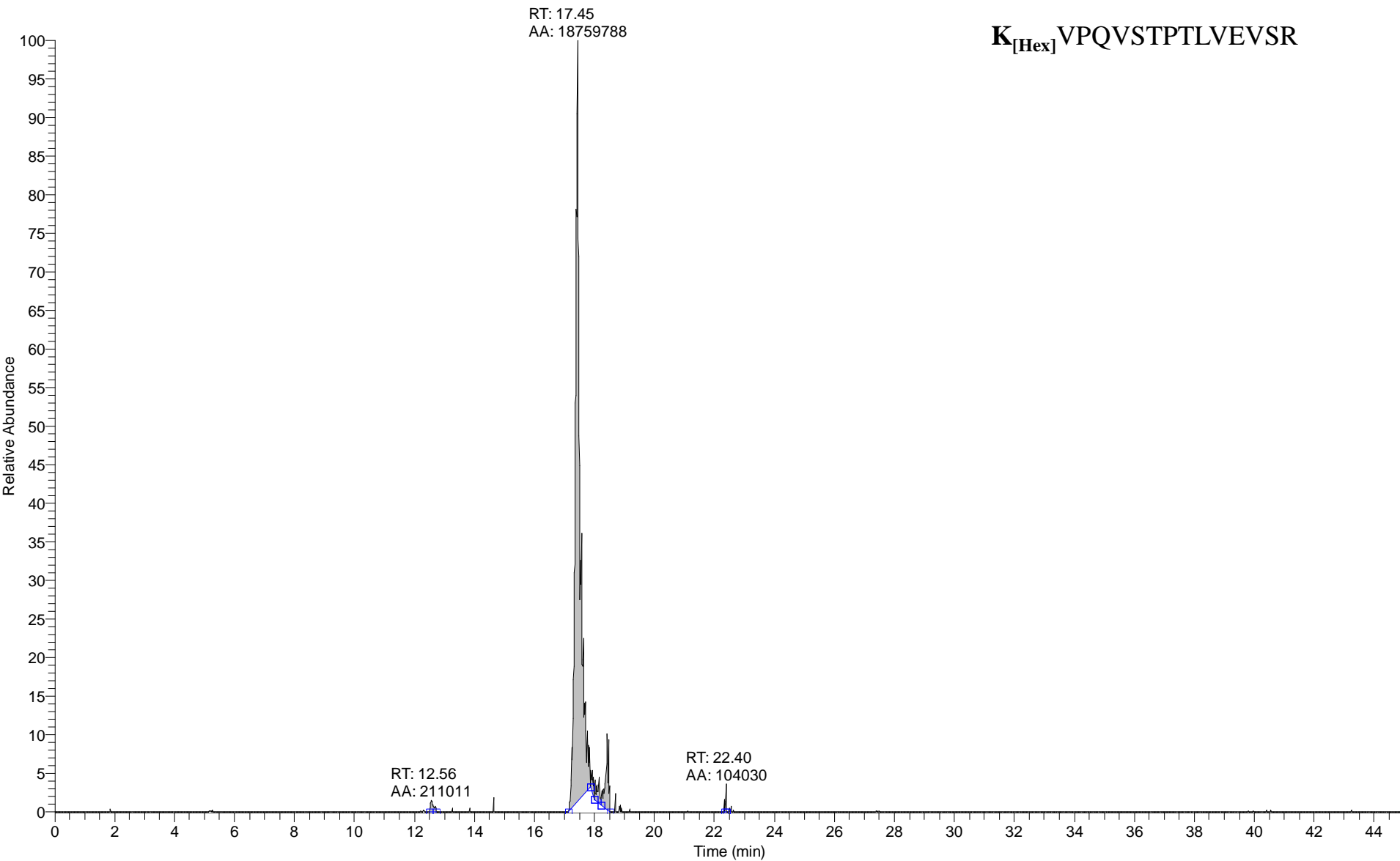


VHK_[Hex]ECCHGDLLECADDRADLAK





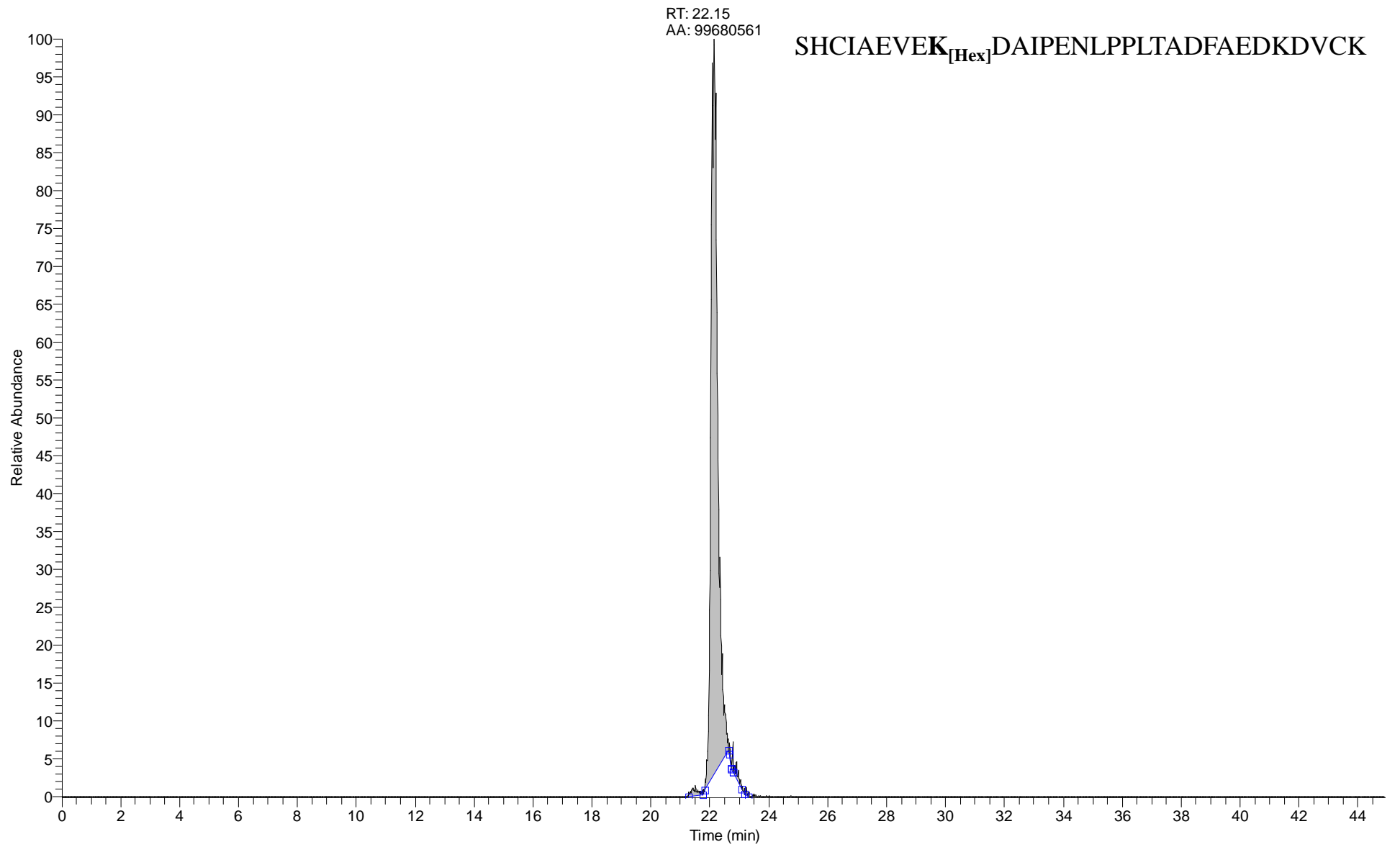
K_[Hex]VPQVSTPTLVEVSR

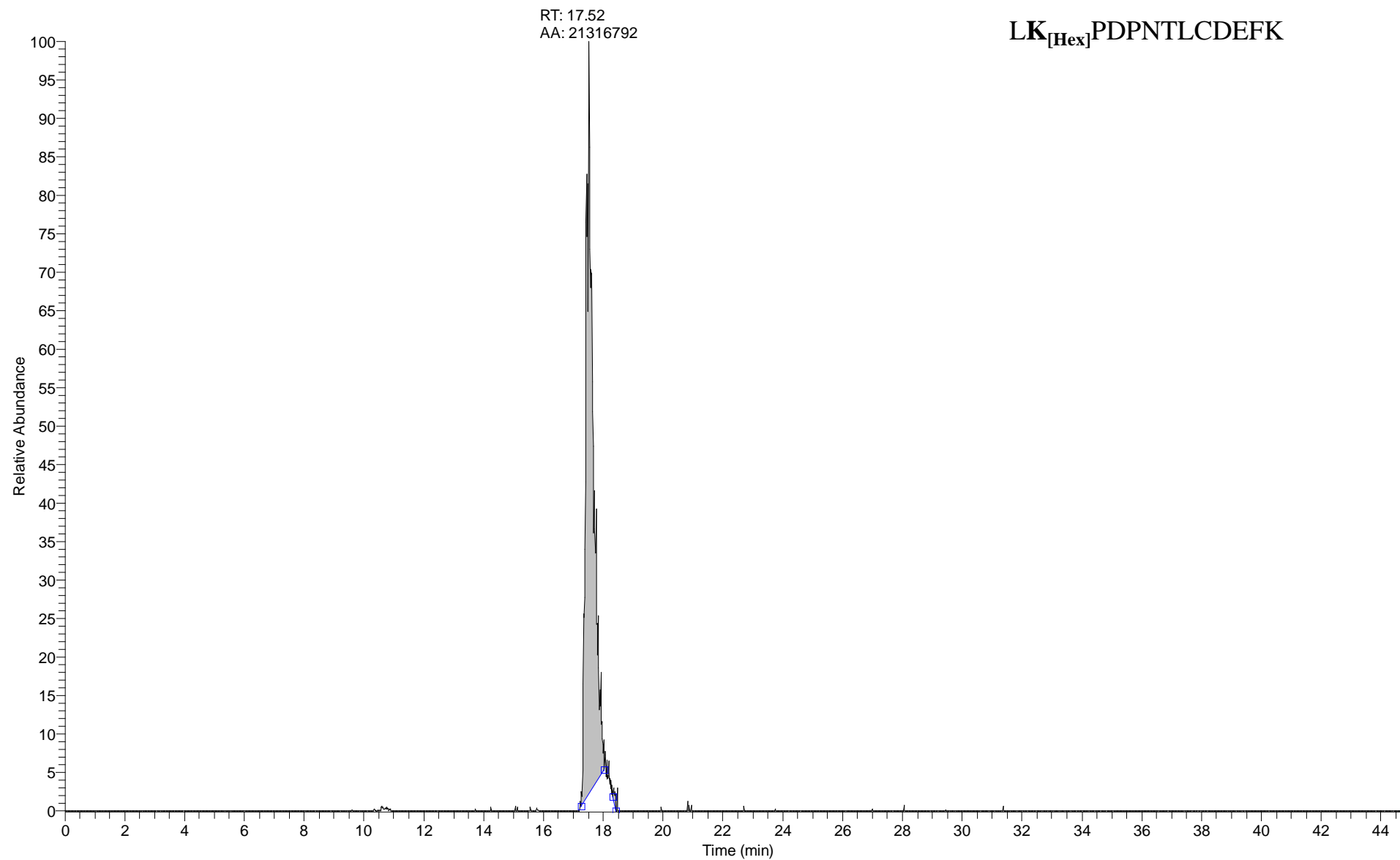


RT: 17.45
AA: 18759788

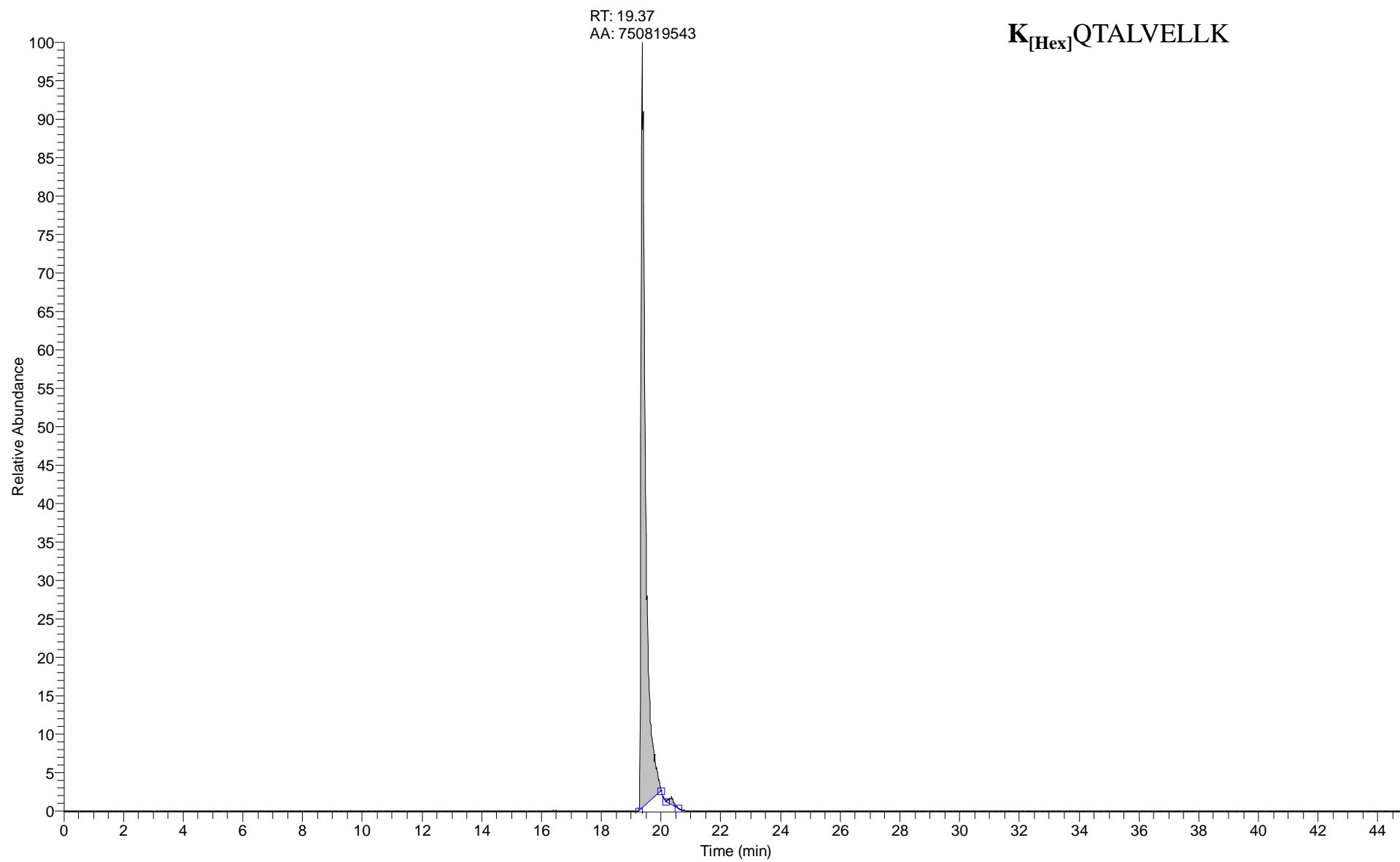
RT: 12.56
AA: 211011

RT: 22.40
AA: 104030

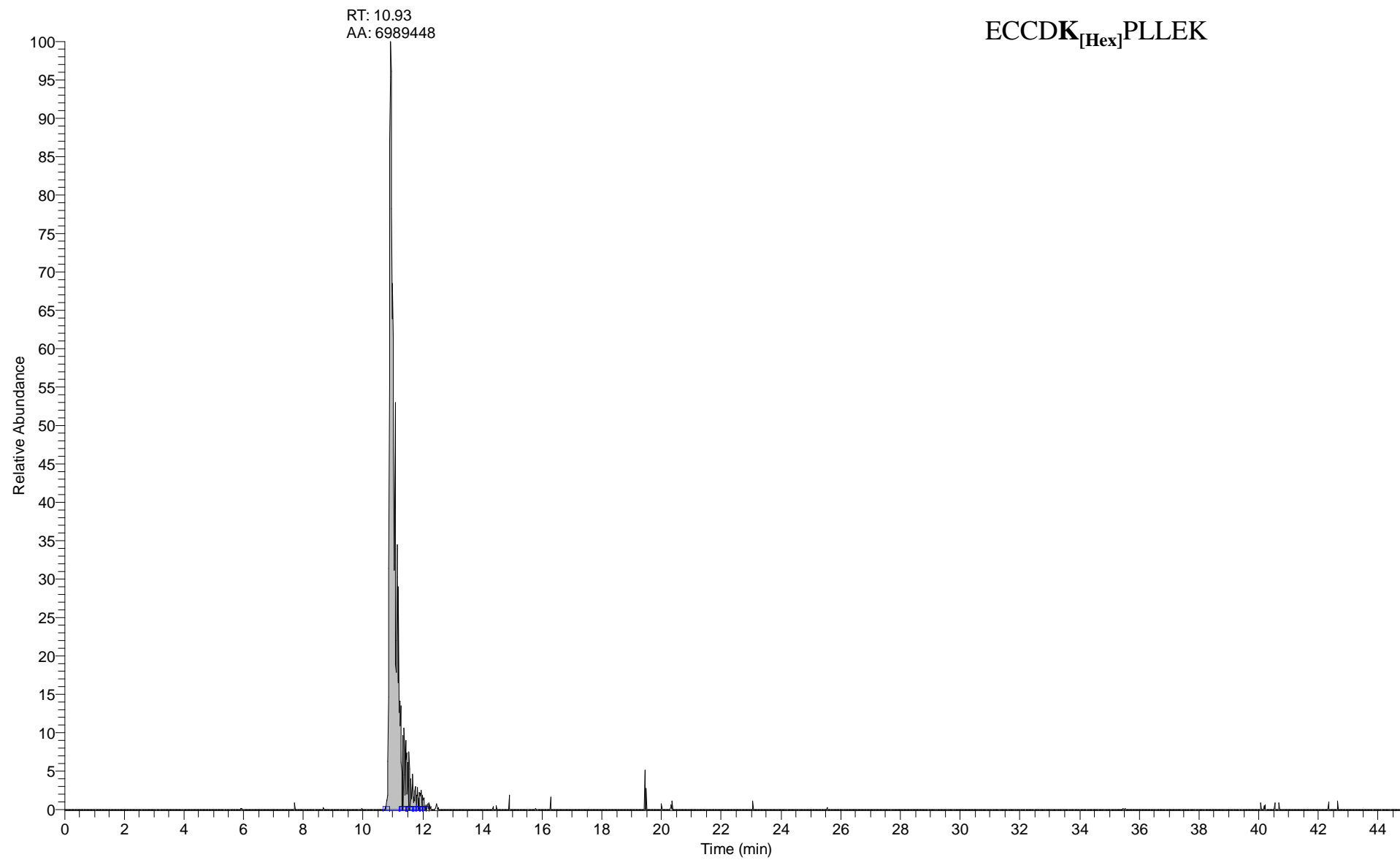




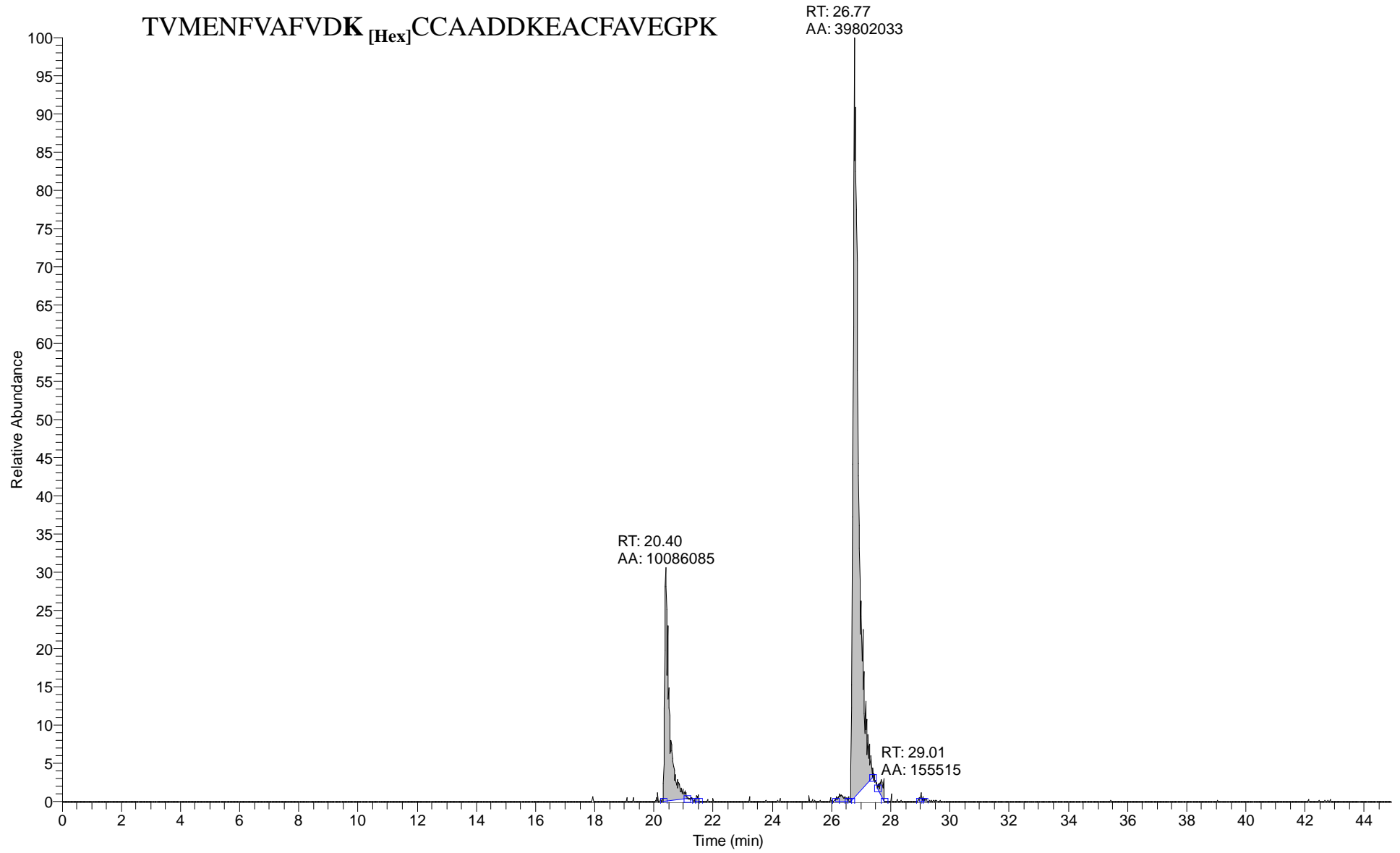
K_[Hex]QTALVELLK



ECCDK_[Hex]PLLEK

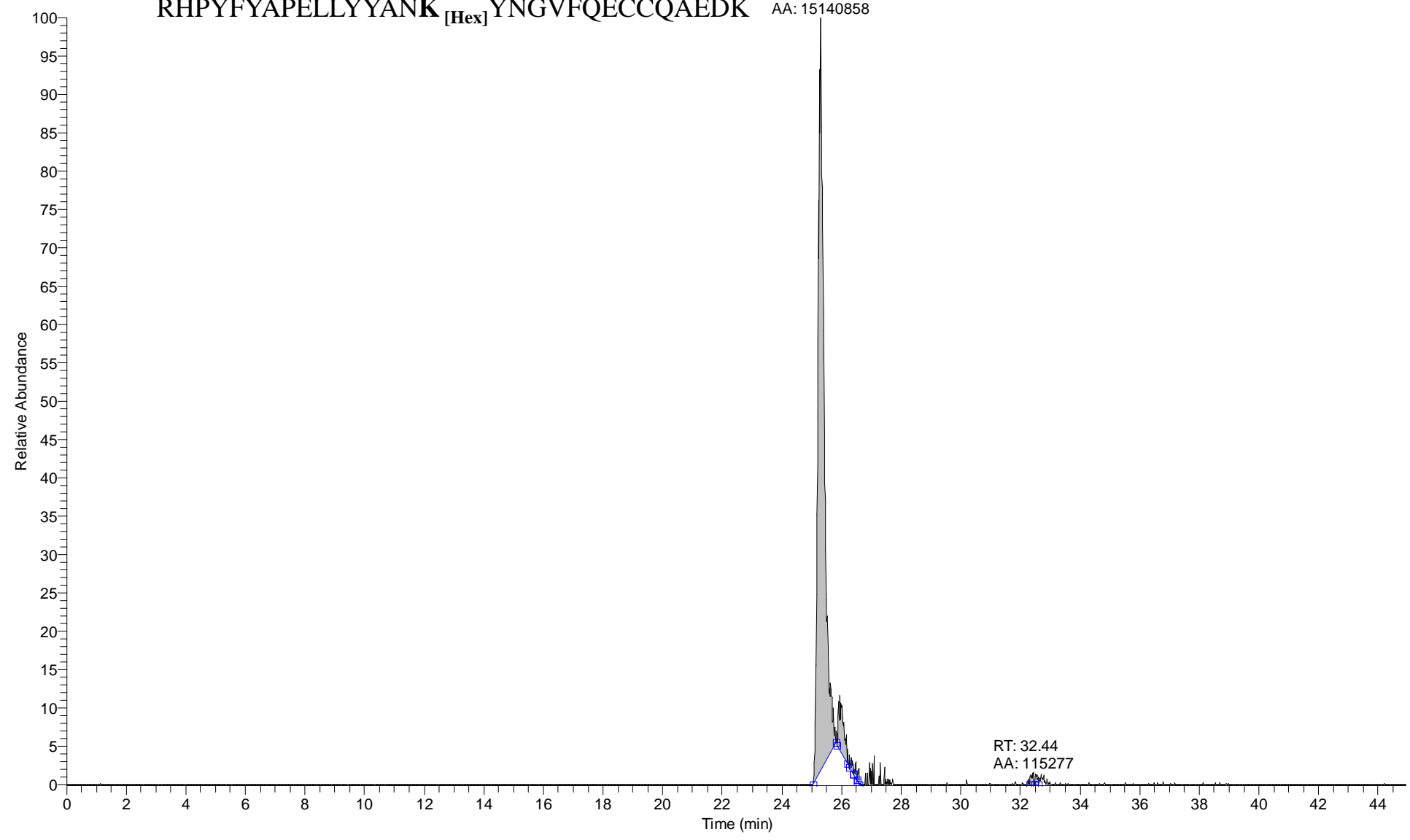


TVMENFVAFVDK [Hex] CCAADDKEACFAVEGPK

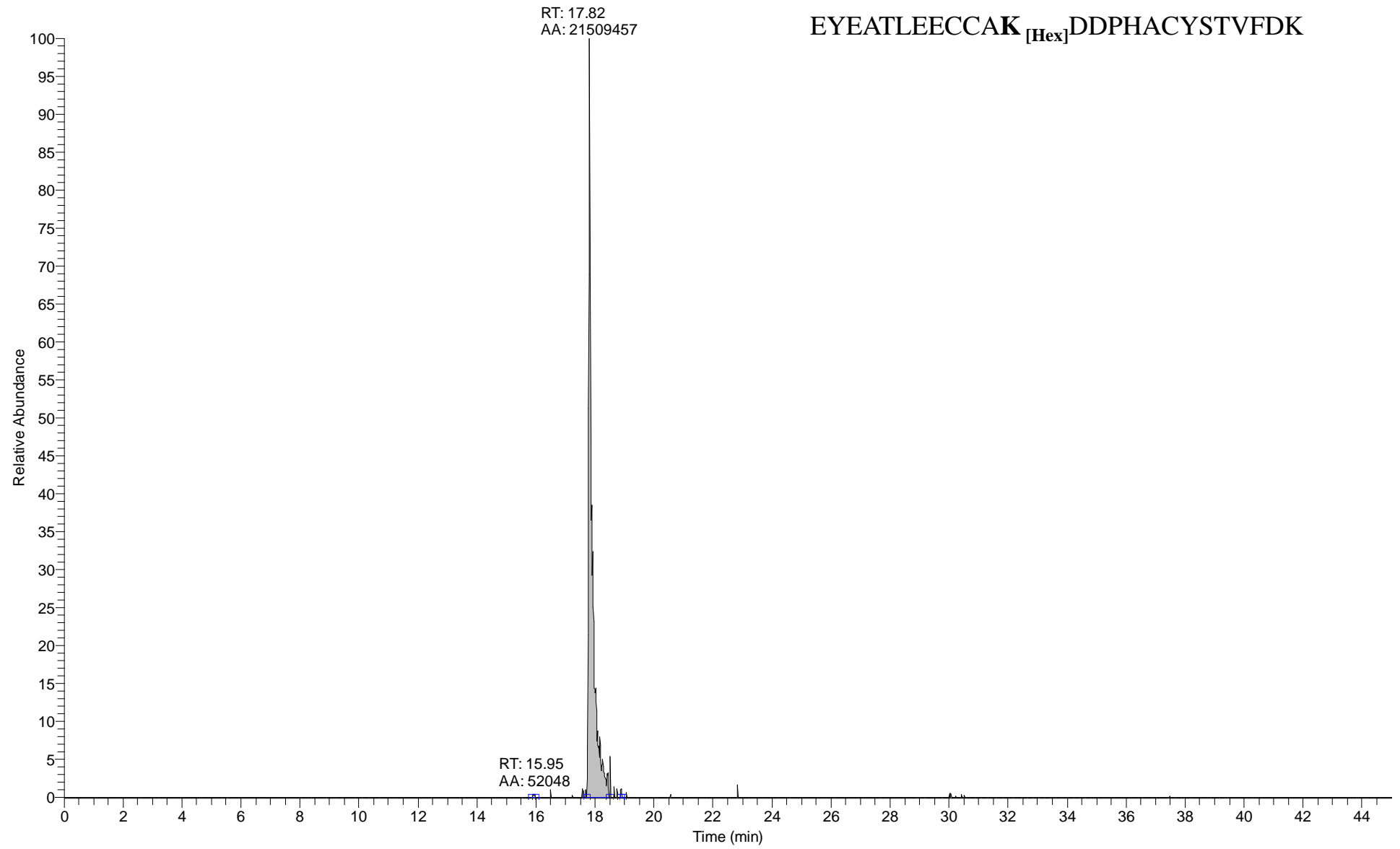


RHPYFYAPPELLYYANK [Hex] YNGVFQECCQAEDK

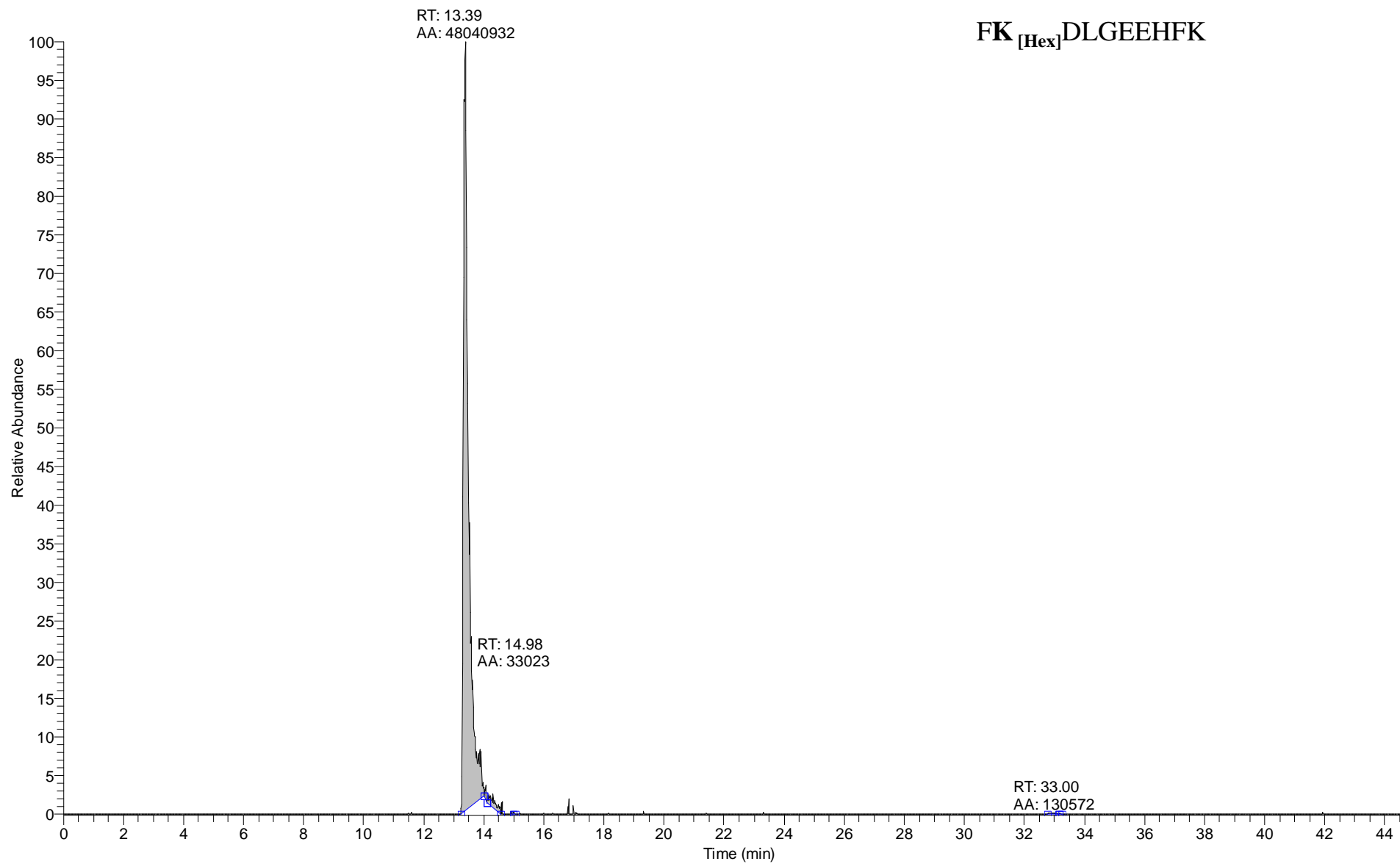
RT: 25.30
AA: 15140858



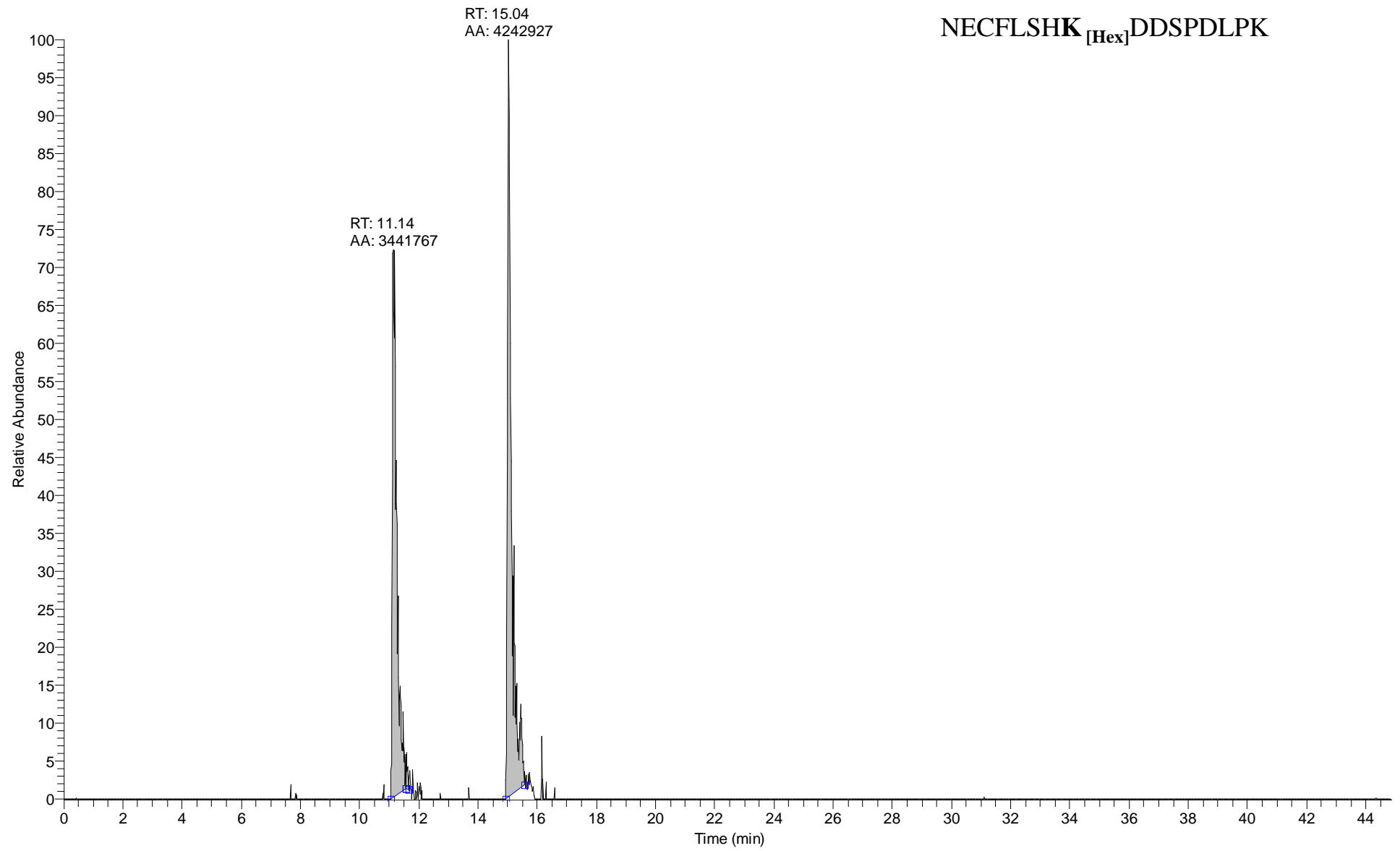
EYEATLEECCA**K** [Hex]DDPHACYSTVFDK

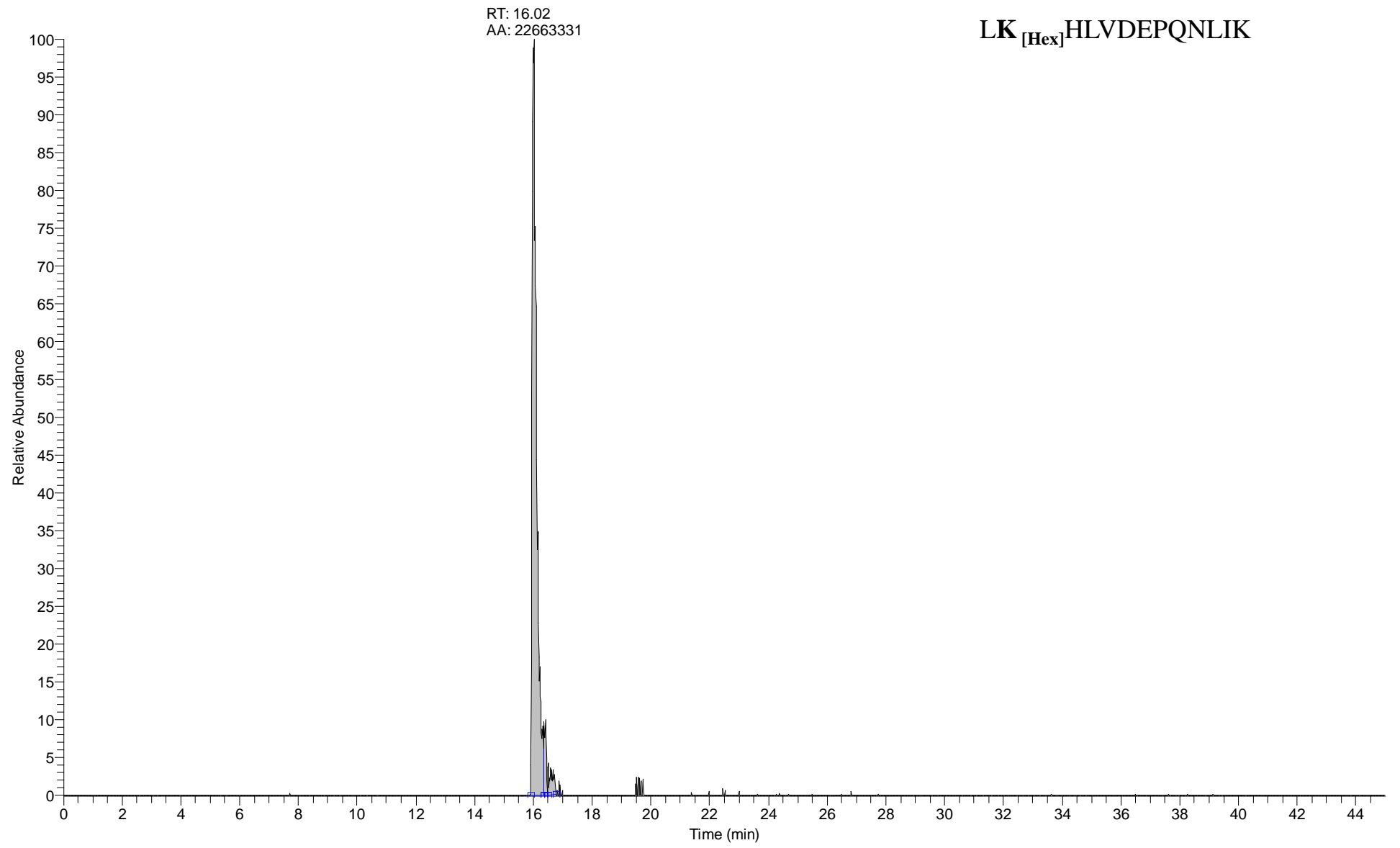


FK_[Hex]DLGEEHFK

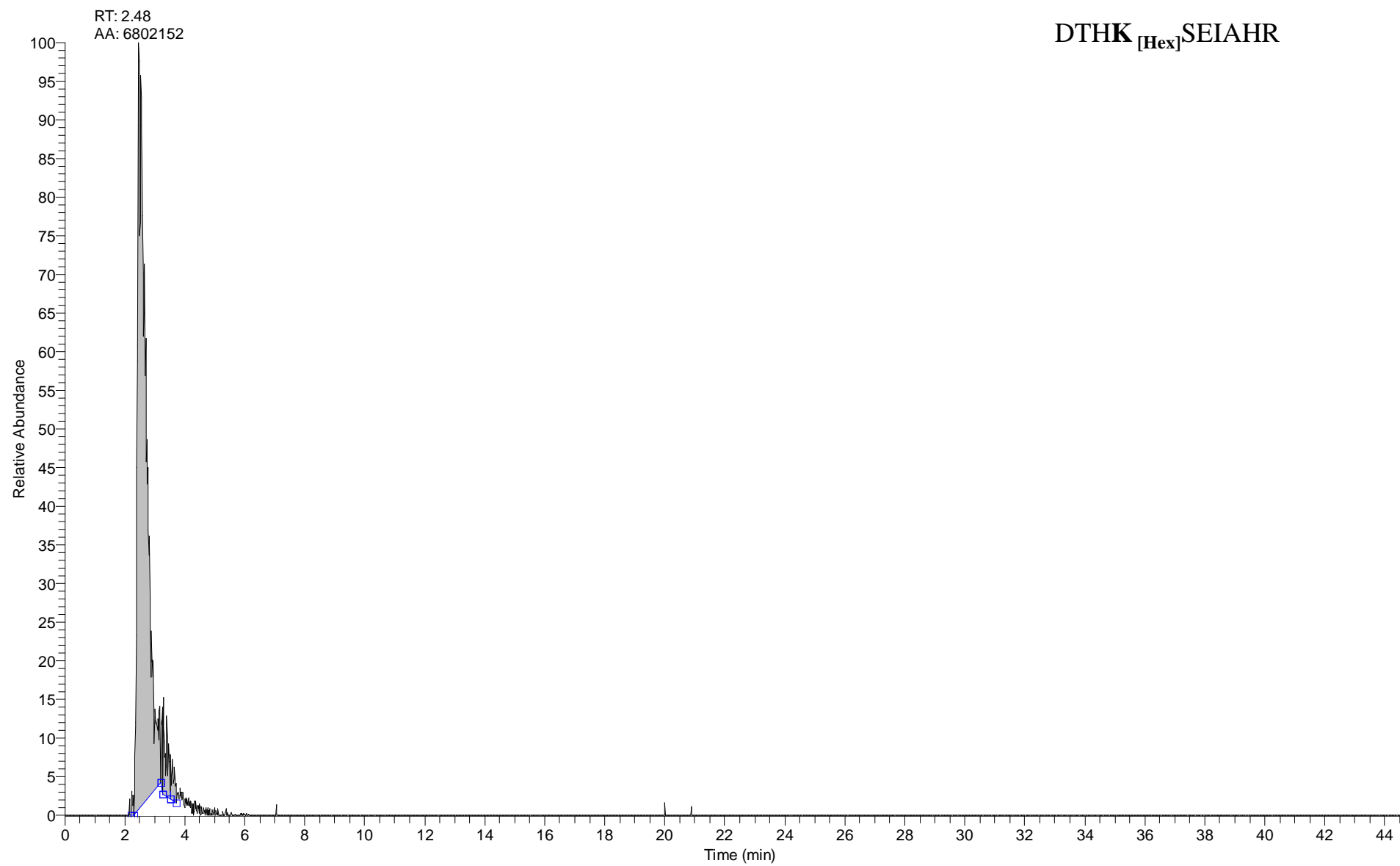


NECFLSHK_[Hex]DDSPDLPK





DTHK_[Hex]SEIAHR



CCTK_[Hex]PESER

