

PEG Determination – pharm-analyt

Free and Total PEG (Polyethylene Glycol) Determination
Total PEG by Using Enzyme Digestion for e.g. Protein PEG

9 Years of Experience with PEG Analysis
5 current Clients in this Area (4 of those Big Pharma, 1 Biotech)
7 currently Analysed PEGs between 4 and 60 kDa (Free / Total)

Bioanalysis: Human+Rat – Plasma, CSF, Liver and Urine
GMP analysis in FDP/FC and BDS

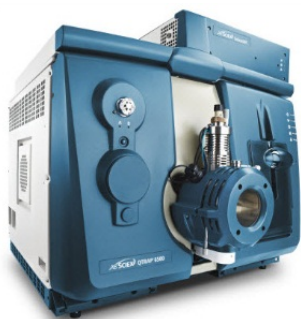
Lowest LLOQ for a PEG in Plasma at 20 ng/mL
for a > 30 kDa PEG
Most methods w Stable Labelled Internal Standards (e.g. C13)

EQUIPMENT – HPLC-MS/MS-Systems

AB SCIEX and Waters

QTRAP 6500

Iontrap, ESI, APCI
HPLC: Shimadzu
MPX
+SelexION



QTRAP 6500

Iontrap, ESI, APCI
HPLC: Shimadzu



API 5000

ESI, APCI, APPI
HPLC: Shimadzu
MPX



Xevo TQ-XS

ESi, ESI
UPLC: I-Class
+UniSpray



Free PEG in Plasma *)

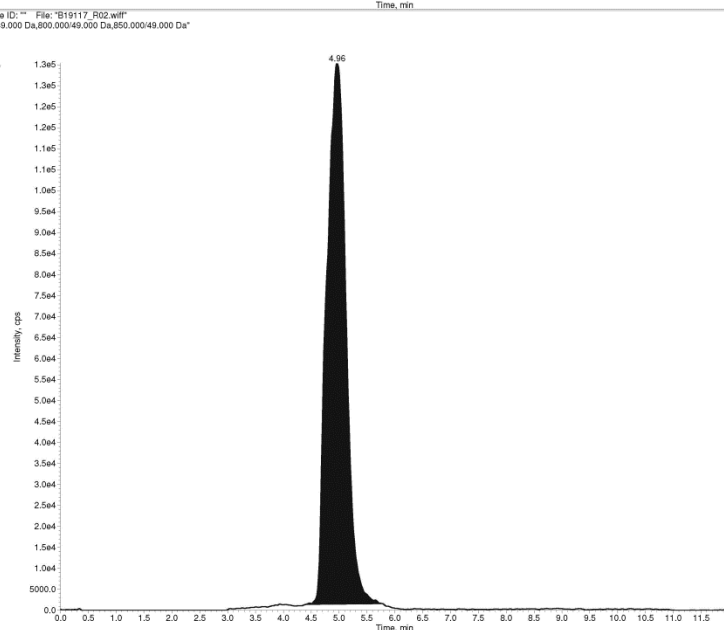
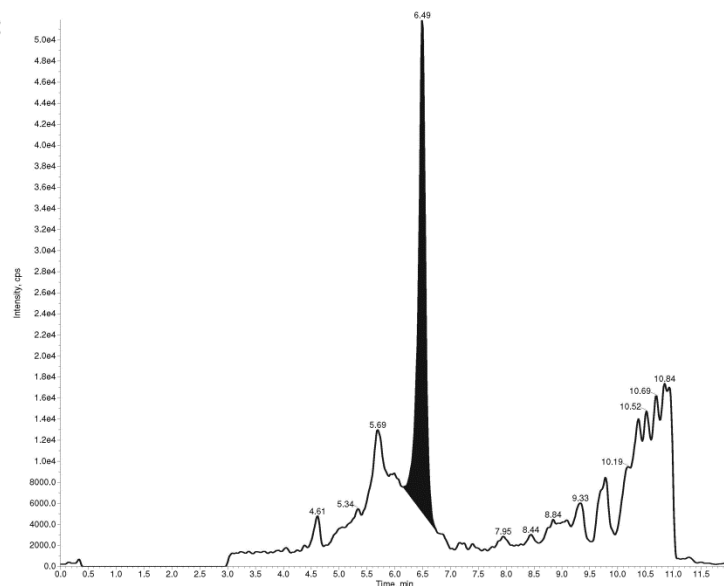
Calibration Range
20.0 – 1,000 ng/mL

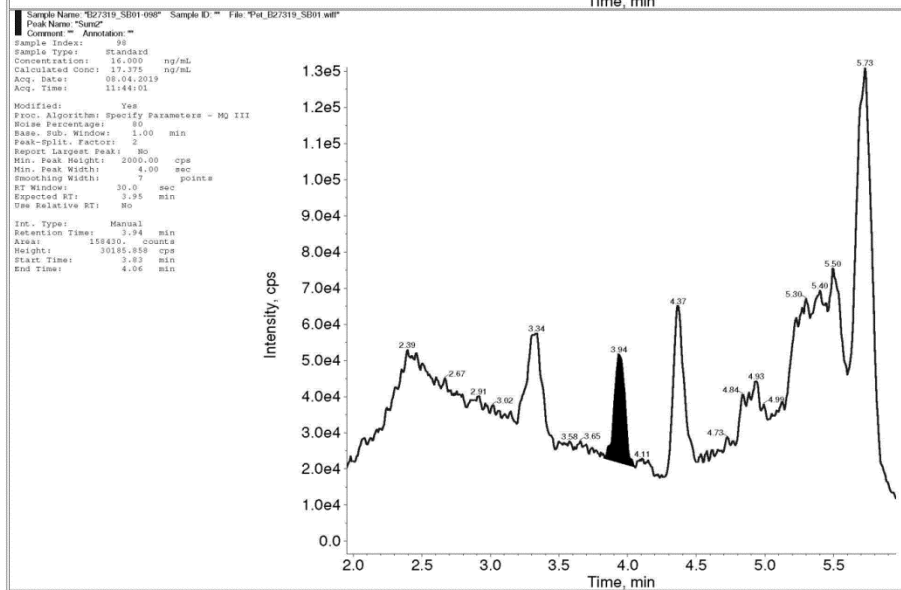
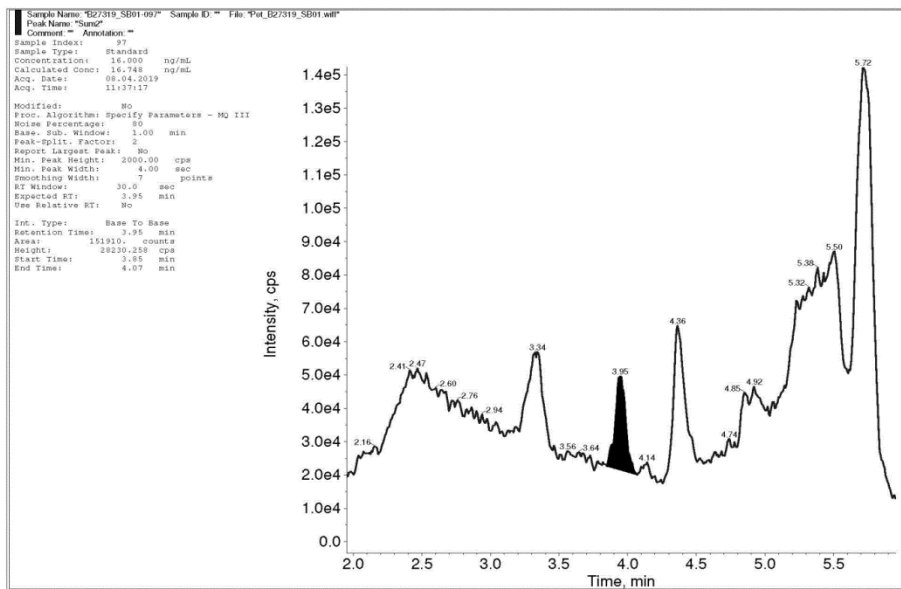
Upper Chrom Std at LLOQ
Lower Chrom Internal Standard

HPLC-MS/MS

Sample Volume for Prep. 50 µL

*) > 30 kDa





PEtOx > 30 kDa in Plasma

Calibration Range
20.0 to 10,000 ng/mL

Upper and Lower Chrom
both Stds at LLOQ
Separately Prepared

HPLC-MS/MS