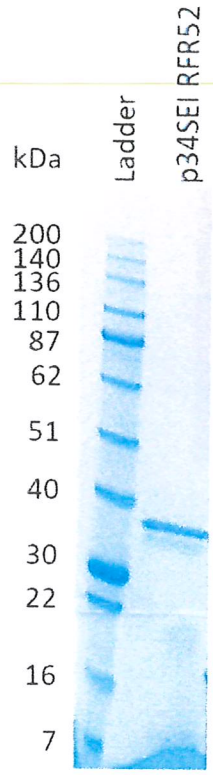
복사본

PEAK PROTEINS

Alderley Park
Macclesfield
Cheshire
SK10 4TG
UK

17 July 2020

SDS PAGE Analysis



- Novex Wedgewell 10-20% Tris-glycine 12 well gel (Invitrogen, XP10202BOX), reducing gel
- Ladder: 3 µL RunBlue TriColour pre-stained (Expedeon, NXA6050)
- 1.3 µg of protein loaded
- Protein purity >90%

Peptide Mapping of Purified band using SCIEX x500b

The bands were reduced, alkylated and digested with trypsin and chymotrypsin. The resultant peptides were run on the Exion LC coupled to the X500B mass spectrometer, a 10 minute reversed phase gradient was used. The data was searched against Swissprot using Mascot Daemon and the sequences above were searched using the BioPharmaView software to determine coverage. Yellow highlighted sequence equates to peptides identified by mass spec.

6His-TEV-p34SEI sequence coverage = 71.3%

MGHHHHHHGENLYFQGLSKGLKRKREEEEEKEPLAVDSWWLDPGHTAVAQAPPAVASSSLFDLSVLKLHHSLQQSEPDLRHLVLVVNTLR
RIQASMAPAAALPPVPSPPAAPSVADNLLASSDAALSASMASLLEDLSHIEGLSQAPQPLADEGPPGRSIGGAAPSLGALDLLGPATGCL
LDDGLEGLFEDIDTSMYDNELWAPASEGLKPGPEDGPGKEEAPELDEAELDYLMDVLVGTQALERPPGPGR

Swissprot match to SRTD1_HUMAN.

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QC Document of 6His-TEV-p34SEI

Construct

6xHis-tag
TEV cleavage sequence

>6His-TEV-p34SEI (*E. coli* expression = pET28b)
MGHHHHHHGENLYFQGLSKGLKRKREEEEEKEPLAVDSWWLDPGHTAVAQAPPAVASSSLFDLSVLKLHHSLQ
QSEPDLRHLVLVVNTLRRIQASMAPAAALPPVPSPPAAPSVADNLLASSDAALSASMASLLEDLSHIEGLSQAPQP
LADEGPPGRSIGGAAPSLGALDLLGPATGCLLDDGLEGLFEDIDTSMYDNELWAPASEGLKPGPEDGPGKEEAPE
LDEAELDYLMDVLVGTQALERPPGPGR

```
Number of amino acids: 251

Molecular weight: 26492.62

Theoretical pI: 4.54

Extinction coefficients:

Extinction coefficients are in units of M⁻¹ cm⁻¹, at 280 nm measured in water.

Ext. coefficient    20970
Abs 0.1% (=1 g/l)   0.792, assuming all pairs of Cys residues form cystines


Ext. coefficient    20970
Abs 0.1% (=1 g/l)   0.792, assuming all Cys residues are reduced
```

Summary

6His-TEV-p34SEI
0.074 mg/mL
12 x 500 µL (444 µg)
Buffer: 20 mM Tris/HCl pH 8.0, 150 mM NaCl, 5% glycerol, 0.5 mM TCEP, 0.5% DDM
Batch No. RFR52

$0.074\,mg/ml \times \frac{1\,mol}{26492\,g} \times \frac{1000\,ml}{1\,L} = 2.79\,mM$