Recombinant human SEMG1 protein

Catalog Number: ATGP2151

PRODUCT INFORMATION

Expression system
E.coli

Domain
24-462aa

UniProt No.
P04279

NCBI Accession No.
NP_002998

Alternative Names
Semenogelin-1, Semenogelin 1, CT103, dJ172H20.2, SEMG, SGI

PRODUCT SPECIFICATION

Molecular Weight
52 kDa (462aa)

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 0.5M NaCl, 10% glycerol, 250mM Imidazole, 0.1mM PMSF, 1mM DTT

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
SEMG1 is the predominant protein in semen. The secreted protein is involved in the formation of a gel matrix that encases ejaculated spermatozoa. The prostate-specific antigen (PSA) protease processes this protein into smaller peptides, with each possibly having a separate function. The proteolysis process breaks down the gel matrix and allows the spermatozoa to move more freely. Two transcript variants encoding different isoforms have been found for this gene. Recombinant human SEMG1 protein, fused to His-tag at N-terminus, was

expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

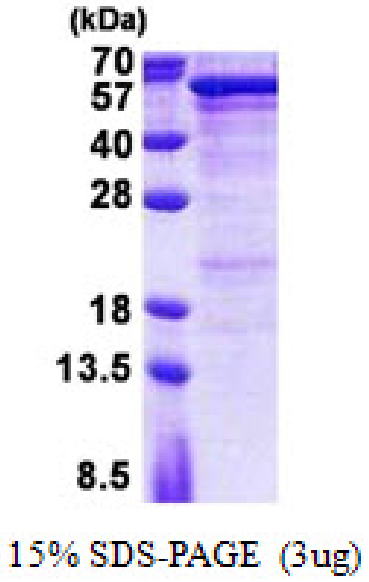
MGSSHHHHHH SSGLVPRGSH MGSQKGGSKG RLPSEFSQFP HGQKGQHYSG QKGKQQTESK GSFSIQYTYH VDANDHDQSR KSQQYDLNAL HKTTKSQRHL GGSQQLLHNK QEGRDHDKSK GHFHRVVIHH KGGKAHRGTQ NPSQDQGNSP SGKGISSQYS NTEERLWVHG LSKEQTSVSG AQKGRKQGGS QSSYVLQTEE LVANKQQRET KNSHQNKGHY QNVVEVREEH SSKVQTSLCP AHQDKLQHGS KDIFSTQDEL LVYNKNQHQT KNLNQDQQHG RKANKISYQS SSTEERRLHY GENGVQKDVS QSSIYSQTEE KAQGKSQKQI TIPSQEQEHS QKANKISYQS SSTEERRLHY GENGVQKDVS QRSIYSQTEK LVAGKSQIQA PNPKQEPWHG ENAKGESGQS TNREQDLLSH EQKGRHQHGS HGGLDIVIIE QEDDSDRHLA QHLNNDRNPL FT

General References

Brillard-Bourdet M, et al. (2002). Eur J Biochem. 269(1):390-5

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.