PRODUCT INFORMATION

Expression system E.coli

Domain 1-519aa

UniProt No. P28838

NCBI Accession No. NP_056991.2

Alternative Names Cytosol aminopeptidase, HEL-S-106, LAP, LAPEP, PEPS

PRODUCT SPECIFICATION

Molecular Weight 58.3 kDa (539aa)

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 50% glycerol, 5mM DTT, 1mM EDTA

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

LAP3 also known as cytosol aminopeptidase. LAP3 presumably involved in the processing and regular turnover of intracellular proteins. This protein catalyzes the removal of unsubstituted N-terminal amino acids from various peptides. It release of an N-terminal amino acid, Xaa-|-Yaa-, in which Xaa is preferably Leu, but may be other amino acids including Pro although not Arg or Lys, and Yaa may be Pro. Amino acid amides and methyl esters are also readily hydrolyzed, but rates on arylamides are exceedingly low. Recombinant human LAP3, fused to Histag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.



Amino acid Sequence

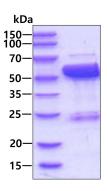
<MGSSHHHHHH SSGLVPRGSH> MFLLPLPAAG RVVVRRLAVR RFGSRSLSTA DMTKGLVLGI YSKEKEDDVP QFTSAGENFD KLLAGKLRET LNISGPPLKA GKTRTFYGLH QDFPSVVLVG LGKKAAGIDE QENWHEGKEN IRAAVAAGCR QIQDLELSSV EVDPCGDAQA AAEGAVLGLY EYDDLKQKKK MAVSAKLYGS GDQEAWQKGV LFASGQNLAR QLMETPANEM TPTRFAEIIE KNLKSASSKT EVHIRPKSWI EEQAMGSFLS VAKGSDEPPV FLEIHYKGSP NANEPPLVFV GKGITFDSGG ISIKASANMD LMRADMGGAA TICSAIVSAA KLNLPINIIG LAPLCENMPS GKANKPGDVV RAKNGKTIQV DNTDAEGRLI LADALCYAHT FNPKVILNAA TLTGAMDVAL GSGATGVFTN SSWLWNKLFE ASIETGDRVW RMPLFEHYTR QVVDCQLADV NNIGKYRSAG ACTAAAFLKE FVTHPKWAHL DIAGVMTNKD EVPYLRKGMT GRPTRTLIEF LLRFSQDNA

General References

Hendrickson SL., et al. (2010) PLoS ONE 5 (9), E12862

DATA

SDS-PAGE



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