PRODUCT INFORMATION

Expression system Baculovirus

Domain 24-474aa

UniProt No. P16675

NCBI Accession No. NP_001033581.1

Alternative Names

Lysosomal protective protein, Carboxypeptidase C, Carboxypeptidase L, Protective protein cathepsin A, PPCA, Protective protein for beta-galactosidase, CTSA, Ppgb

PRODUCT SPECIFICATION

Molecular Weight

52.4 kDa (459aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

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

CTSA, also known as lysosomal protective protein isoform b, is a component of the lysosomal multienzyme complex along with beta-galactosidase and sialidase Neu1. It is a multicatalytic enzyme with deamidase and esterase in addition to carboxypeptidase activities. Recombinant mouse CTSA, fused to His-tag at C-terminus,



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was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

APDQDEIDCL PGLAKQPSFR QYSGYLRASD SKHFHYWFVE SQNDPKNSPV VLWLNGGPGC SSLDGLLTEH GPFLIQPDGV TLEYNPYAWN LIANVLYIES PAGVGFSYSD DKMYVTNDTE VAENNYEALK DFFRLFPEYK DNKLFLTGES YAGIYIPTLA VLVMQDPSMN LQGLAVGNGL ASYEQNDNSL VYFAYYHGLL GNRLWTSLQT HCCAQNKCNF YDNKDPECVN NLLEVSRIVG KSGLNIYNLY APCAGGVPGR HRYEDTLVVQ DFGNIFTRLP LKRRFPEALM RSGDKVRLDP PCTNTTAPSN YLNNPYVRKA LHIPESLPRW DMCNFLVNLQ YRRLYQSMNS QYLKLLSSQK YQILLYNGDV DMACNFMGDE WFVDSLNQKM EVQRRPWLVD YGESGEQVAG FVKECSHITF LTIKGAGHMV PTDKPRAAFT MFSRFLNKEP Y<VEHHHHHH>

General References

Seyrantepe V., et al. (2008) Circulation. 117:1973-1981. Hiraiwa M., et al. (1999) Cell Mol Life Sci. 56:894-907.

DATA

SDS-PAGE



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