

Recombinant human Neprilysin/CD10 protein

Catalog Number: ATGP3907

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

52-750aa

UniProt No.

P08473

NCBI Accession No.

NP_000893

Alternative Names

MME, Neprilysin, CALLA, CD10, CMT2T, NEP, SCA43, SFE, Atriopeptidase, Common acute lymphocyticleukemia antigen, Enkephalinase, Neutral endopeptidase, Skin fibroblast elastase, Membrane metalloendopeptidase, EPN

PRODUCT SPECIFICATION

Molecular Weight

80.9 kDa (708aa)

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 100mM NaCl, 0.1mM PMSF, 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

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

Biological Activity

Specific activity is > 5,000pmol/min/ug in which one unit will convert 1.0pmole of Mca-SEVNLDAEFRK(Dnp)RR-NH₂ to MCA- Pro-Leu-OH per minute at pH 8.8 at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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.

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BACKGROUND

Description

Neprilysin, also known as MME, is a zinc metallopeptidase expressed at the cell surface of a variety of cells. It degrades the amyloid beta peptide whose abnormal misfolding and aggregation in neural tissue has been implicated as a cause of Alzheimer's disease. It is expressed in a wide variety of tissues and is particularly abundant in kidney. It is also a common acute lymphocytic leukemia antigen that is an important cell surface marker in the diagnosis of human acute lymphocytic leukemia (ALL). It is of use in hematological diagnosis since it is expressed by early B, pro-B and pre-B lymphocytes, and by lymph node germinal centers. Recombinant human neprilysin, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

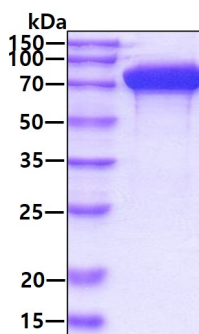
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 DIVAVQKAKA LYRSCINESA IDSRGGEPLLKLLPDIYGWVATENWEQKY GASWTAEKAI AQLNSKYGKK VLINLFGVTD
 DKNSVNHVIHIDQPRLGLPSRDYECTGIY KEACTAYVDF MISVARLIRQ EERLPIDENQ
 LALEMNKVMELEKEIANATAKPEDRNDPML LYNKMTLAQI QNNFSLEING KPFSWLNFTN
 EIMSTVNISITNEEDVVVYAPEYLTKLKPI LTKYSARDLQ NLMSWRFIMD LVSSLSRTYK
 ESRNAFRKALYGTTSETATWRRCANVYVNGN MENAVGRLYV EAAFAGESKH VVEDLIAQIR
 EVFIQTLDDLTWMDAETKKRAEEKALAIKE RIGYPDDIVS NDNKLNNEYL ELNYKEDEYF
 ENIIQNLKFSQSKQLKLLREKVDKDEWISG AAVVNAFYSS GRNQIVFPAG ILQPPFFSAQ
 QSNLNYGGIGMVGHEITHGFDDNGRNFN KDGDLDVDDWT QQSASNFKEQ SQCMVYQYGN
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 NFAQVWCGTYRPEYAVNSIKTDVHSPGNFR IIGTLQNSAE FSEAFHCRKN SYMNPEKKCR VW<HHHHHH>

General References

Auer-Grumbach M., et al. (2016) Am J Hum Genet. 99:607-623.
 Hama E., et al. (2005) Med Hypotheses. 65:498-500.

DATA

SDS-PAGE



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