

Recombinant Human CD10/Neprilysin Protein (Fc Tag)

Catalog No. PKSH031423

Note: Centrifuge before opening to ensure complete recovery of vial contents.

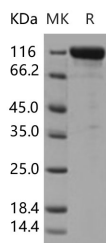
Description

Synonyms	CALLA;CD10;NEP;SFE
Species	Human
Expression Host	HEK293 Cells
Sequence	Tyr 52-Trp 750
Accession	NP_000893.2
Calculated Molecular Weight	106 kDa
Observed molecular weight	120-130 kDa
Tag	N-hFc
Bioactivity	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPPGFSAFK(Dnp)-OH, (R&D Systems, Catalog # ES005). The specific activity is > 1000 pmoles/min/μg.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 10 (CD10), also known as Neprilysin and neutral endopeptidase, is a member of the CD system. CD10 is a zinc-dependent metalloprotease enzyme that had function to degrade a number of small secreted peptides such as the amyloid beta peptide. It exist as a membrane-bound protein and have high concentration in kidney and lung tissues. Mutations in the CD10 gene can induce the familial forms of Alzheimer's disease, providing strong evidence for the protein's association with the Alzheimer's disease process. CD10 is also associated with other biochemical processes.