

## Recombinant Human CD10/Neprilysin Protein

**Catalog No.** PKSH031421

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

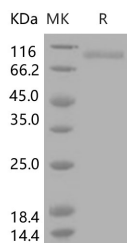
### Description

<b>Synonyms</b>	CALLA;CD10;NEP;SFE
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Tyr 52-Trp 750
<b>Accession</b>	NP_000893.2
<b>Calculated Molecular Weight</b>	80.0 kDa
<b>Observed molecular weight</b>	90-100 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPPGFSAFK(Dnp)-OH, (R&D Systems, Catalog # ES005). The specific activity is > 1, 000 pmoles/min/μg.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per μg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 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.
<b>Reconstitution</b>	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.