

Synonym

MME,CALLA,CD10,DKFZp686O16152,MGC126681,MGC126707,NEP,SFE,
Neprilysin

Source

Human Neprilysin, Tag Free(MME-H521b) is expressed from human 293 cells (HEK293). It contains AA Tyr 52 - Trp 750 (Accession # [NP_000893.2](#)).

Molecular Characterization

Neprilysin(Tyr 52 - Trp 750)
NP_000893.2

This protein carries no "tag"

The protein has a calculated MW of 80.0 kDa. The protein migrates as 80-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 20 mM Tris, 100 mM NaCl, pH8.0 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

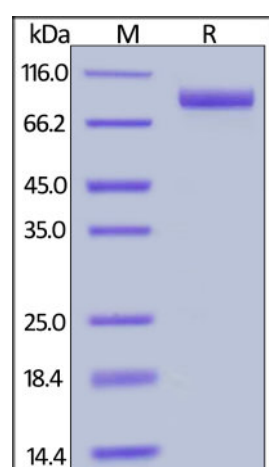
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Neprilysin, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, MCA-RPPGFSAFK(DNP)-OH. The specific activity is >1500 pmol/min/µg (QC tested).

Background

Cluster of differentiation 10 (CD10) is also known as membrane metallo-endoropeptidase, neutral endopeptidase (NEP), Neprilysin, and common acute lymphoblastic leukemia antigen (CALLA), is a 90-110-kDa type II transmembrane glycoprotein normally expressed by a variety of tissues, including epithelial cells of the prostate, kidney, intestine, endometrium, adrenal glands, and lung. This zinc-dependent metalloprotease enzyme cleaves peptide bonds on the amino side of hydrophobic residues and inactivates a variety of physiologically active secreted peptides. CD20 is thought to be the rate-limiting degrading enzyme of amyloid β peptide ($A\beta$) whose abnormal misfolding and aggregation in neural tissue has been implicated in the development of Alzheimer's disease (AD). CD10 is also identified as the common acute lymphoblastic leukemia antigen (CALLA) present on leukemic cells of pre-B phenotype, and thus serves as the most important biomarker in the diagnosis of human acute lymphocytic leukemia (ALL).

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.