

Biotinylated Human ENPP3 / CD203c Protein, Avitag™,His Tag (MALS verified)

Catalog # EN3-H82Q5



BIOSYSTEMS
Acro

Synonyms

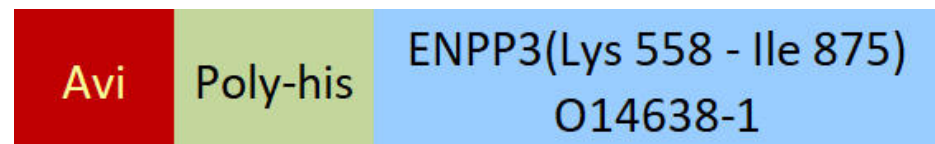
ENPP3, CD203c, NPP3, E-NPP3, PD-Ibeta, NPPase, PDNP3

Source

Biotinylated Human ENPP3 Protein, Avitag,His Tag (EN3-H82Q5) is expressed from human 293 cells (HEK293). It contains AA Lys 558 - Ile 875 (Accession # [O14638-1](#)).

Predicted N-terminus: Gly

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the N-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 39.8 kDa. The protein migrates as 45-65 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

0.7-1.0 as determined by the SABA assay / HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

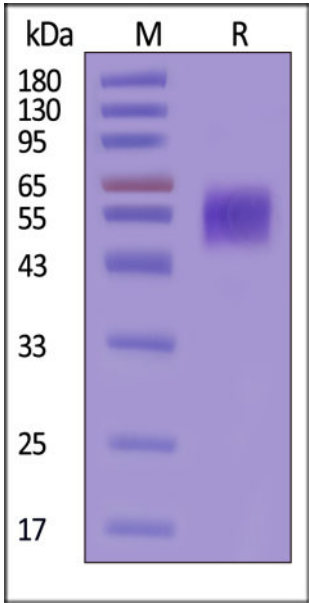
This product is stable after storage at:

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

ACRO Quality Management System

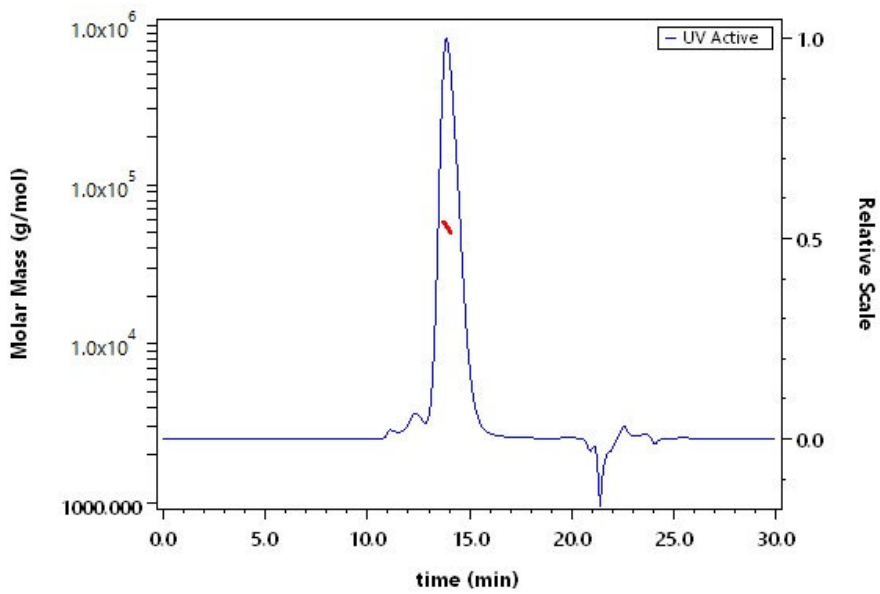
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



Biotinylated Human ENPP3 Protein, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Biotinylated Human ENPP3 Protein, Avitag,His Tag (Cat. No. EN3-H82Q5) is more than 90% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.

Background

The human NPP family contains seven members which can be classified into two groups according to their substrate preferences. The first class comprises the nucleotide-degrading proteins NPP1, 3 and 4. NPP3 (CD203c, ENPP3) is expressed in multiple organs, including on epithelial and mucosal surfaces, and notably on basophils and mast cells. Activation of basophils by antigen-bound IgE leads to release of inflammatory mediators and rapid upregulation of NPP3 to the cell surface. This protein is in fact a common marker for diagnosing allergen sensitivity with patient basophils by flow cytometry. Basophils and mast cells mediate the response to certain pathogens, as well as acute and chronic allergic reactions. Following activation, these cells release ATP, which further stimulates them in an autocrine manner. NPP3 upregulation serves to degrade ATP and suppress chronic allergic inflammation (but not the acute response).



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