

Synonym

Ephrin type-A receptor 5

Source

Human EphA5, His Tag(EP5-H52H5) is expressed from human 293 cells (HEK293). It contains AA Pro 25 - Pro 573 (Accession # [P54756-1](#)).

Predicted N-terminus: Pro 25

Molecular Characterization

EphA5(Pro 25 - Pro 573) P54756-1	Poly-his
-------------------------------------	----------

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 62.7 kDa. The protein migrates as 70-80 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.

>95% 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.

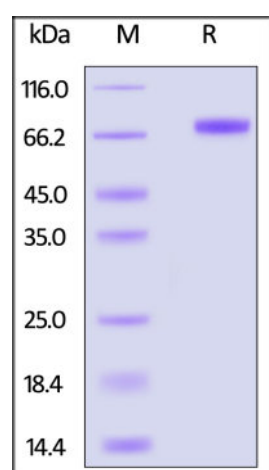
Storage

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

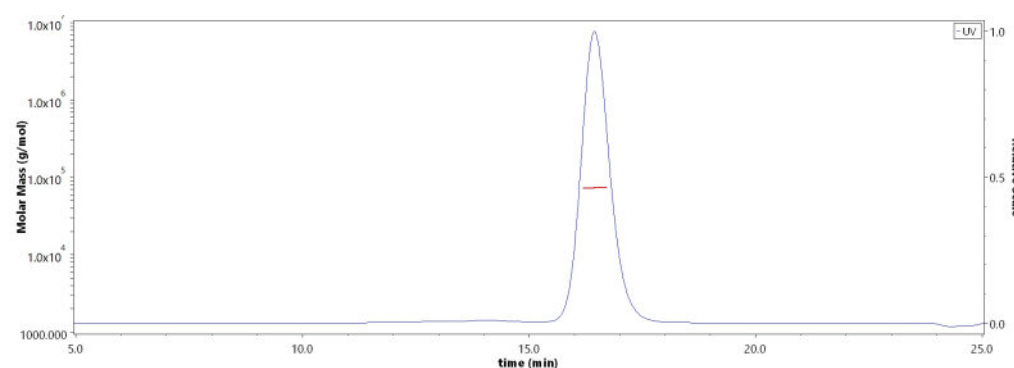
Please avoid repeated freeze-thaw cycles.

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.

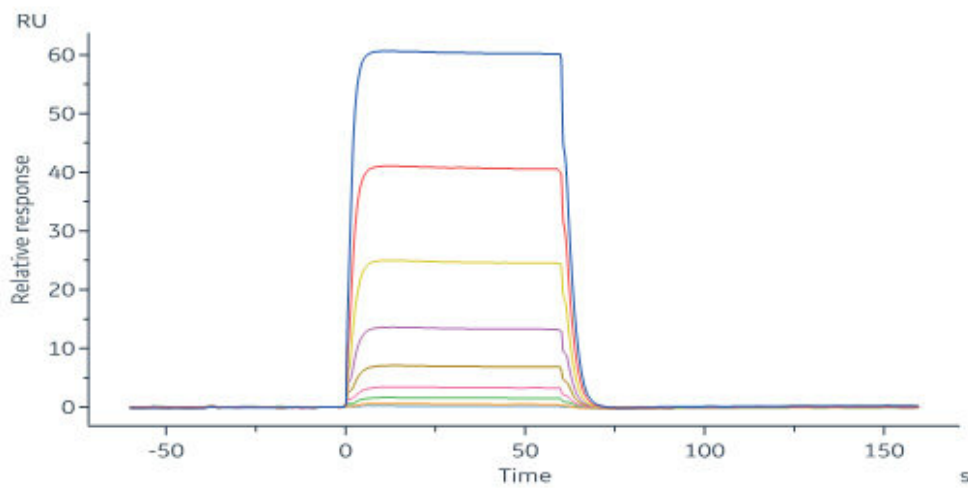
SDS-PAGE

Human EphA5, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-SPR**SEC-MALS**

The purity of Human EphA5, His Tag (Cat. No. EP5-H52H5) is more than 95% and the molecular weight of this protein is around 65-80 kDa verified by SEC-MALS.

[Report](#)



Human Ephrin-A3, Fc Tag (Cat. No. EA3-H5258) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human EphA5, His Tag (Cat. No. EP5-H52H5) with an affinity constant of 0.576 μ M as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin-A family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Activated by the ligand ephrin-A1/EF1 regulates migration, integrin-mediated adhesion, proliferation and differentiation of cells. Regulates cell adhesion and differentiation through DSG1/desmoglein-1 and inhibition of the ERK1/ERK2 (MAPK3/MAPK1, respectively) signaling pathway. Engaged by the ligand ephrin-A5/EF5 may regulate lens fiber cells shape and interactions and be important for lens transparency development and maintenance.

Clinical and Translational Updates

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