

Biotinylated Human ROBO1 Protein, His,Avitag™ (MALS verified)

Catalog # RB1-H82E5



Synonyms

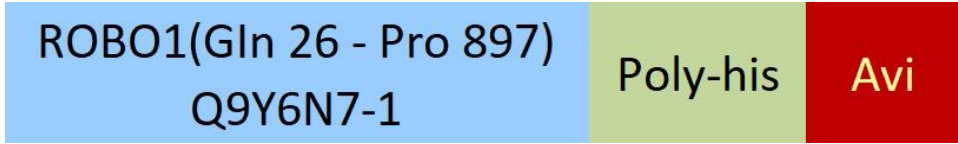
ROBO1, DUTT1

Source

Biotinylated Human ROBO1, His,Avitag (RB1-H82E5) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Pro 897 (Accession # [Q9Y6N7-1](#)).

Predicted N-terminus: Gln 26

Molecular Characterization



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

The protein has a calculated MW of 99.2 kDa. The protein migrates as 100-115 kDa 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

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.2 EU per µg by the LAL method / rFC 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.

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.

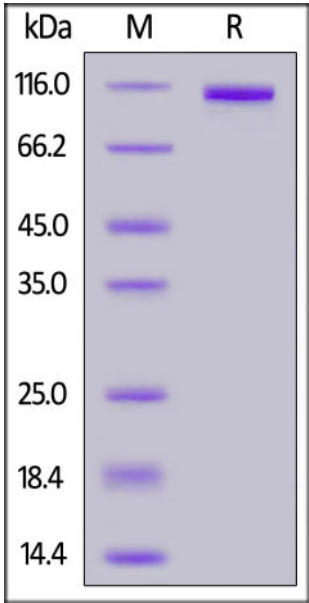
This product is stable after storage at:

- -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

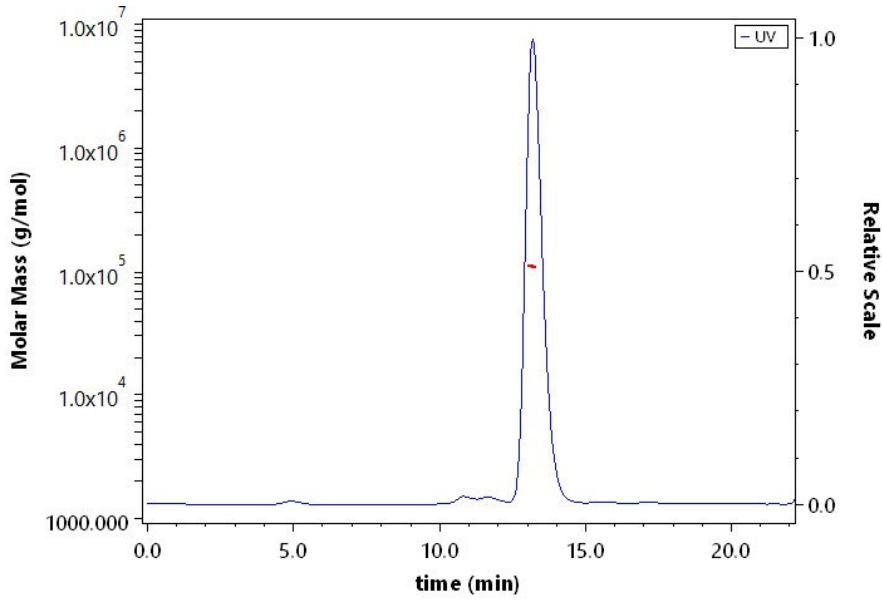
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



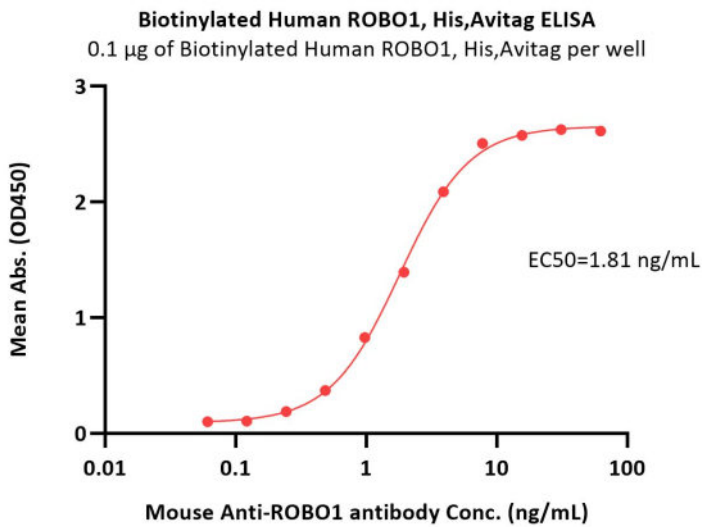
Biotinylated Human ROBO1, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



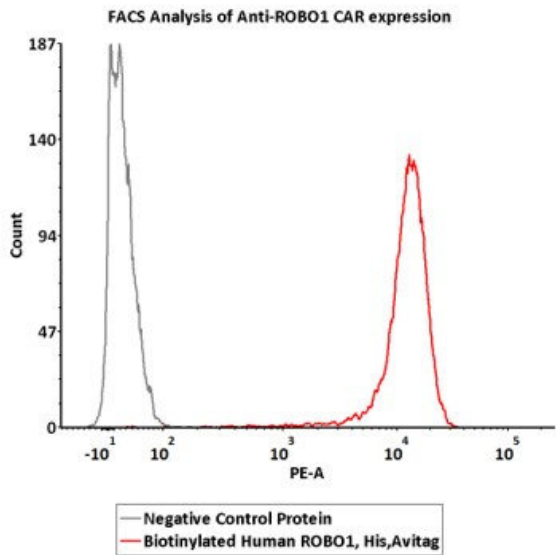
The purity of Biotinylated Human ROBO1, His,Avitag (Cat. No. RB1-H82E5) is more than 95% and the molecular weight of this protein is around 100-122 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Biotinylated Human ROBO1, His,Avitag (Cat. No. RB1-H82E5) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Mouse Anti-ROBO1 antibody with a linear range of 0.06-4 ng/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-ROBO1 CAR-293 cells were stained with 100 µL of 3 µg/mL of Biotinylated Human ROBO1, His,Avitag (Cat. No. RB1-H82E5) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

Background

ROBO1 is a member of the ROBO immunoglobulin superfamily of proteins, and it plays a crucial role in cell motility and migration during embryogenesis and organogenesis. In addition, evidence showed that ROBO1 might drive migration and invasion in malignant cells, such as glioma and breast cancer, which might play

a role in cancer aggressiveness. In contrast, some studies suggested that ROBO1 pathways play a key role in tumors by acting as a tumor suppressor, especially in cell invasion.



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