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

Catalog # RB1-H82E5

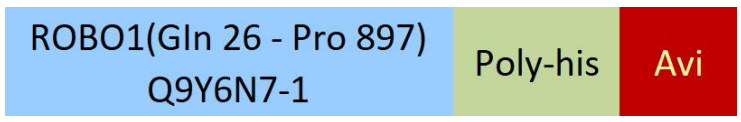
Synonym

ROBO1,DUTT1

Source

Biotinylated Human ROBO1, His,Avitag(RB1-H82E5) is expressed from human 293 cells (HEK293). It contains AA GIn 26 - Pro 897 (Accession # Q9Y6N7-1). Predicted N-terminus: GIn 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 1.0 EU per μg by the LAL method.

Purity

>95% 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.

Storage

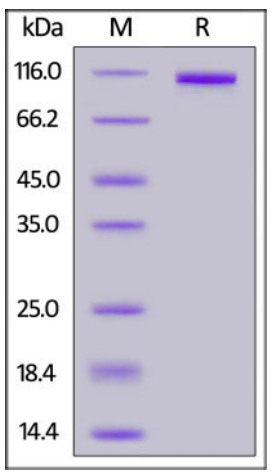
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

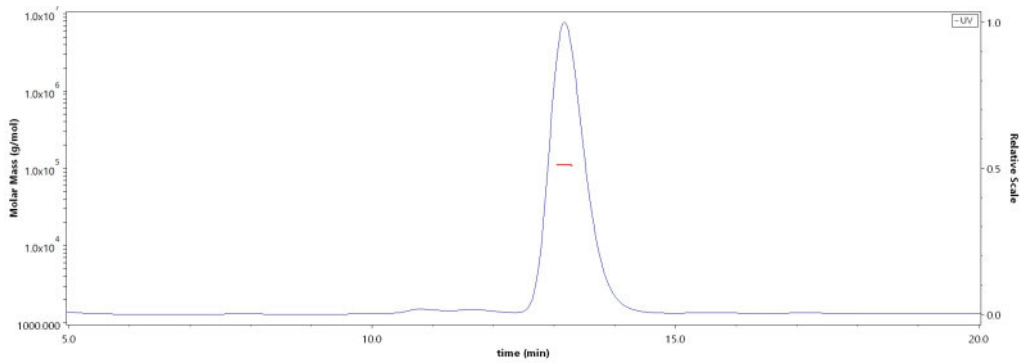
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



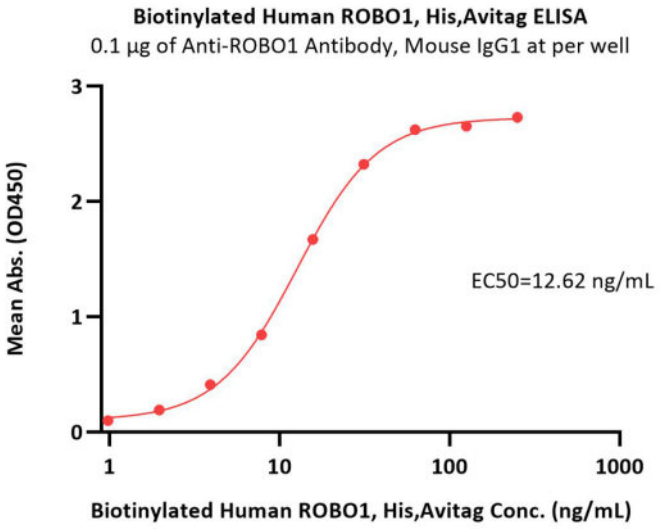
Biotinylated Human ROBO1, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



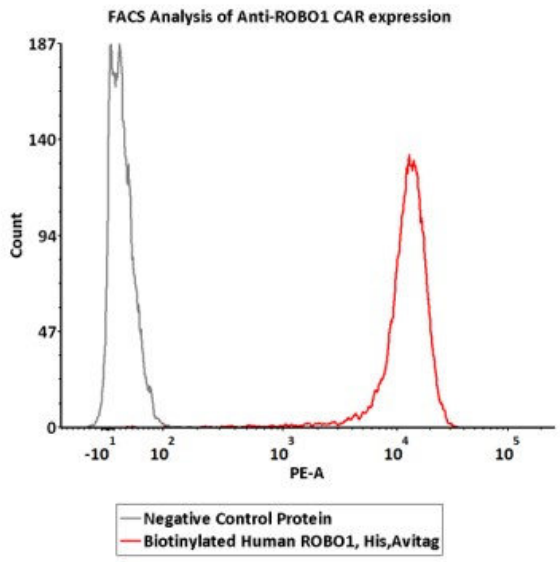
The purity of Biotinylated Human ROBO1, His,Avitag (Cat. No. RB1-H82E5) is more than 90% and the molecular weight of this protein is around 100-122 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Anti-ROBO1 Antibody, Mouse IgG1 at 1 μg/mL (100 μL/well) can bind Biotinylated Human ROBO1, His,Avitag (Cat. No. RB1-H82E5) with a linear range of 2-31 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.

Clinical and Translational Updates

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