

Synonym

FOLR-1,FBP,FOLR,FRα

Source

Biotinylated Human FOLR1, Fc,Avitag(FO1-H82F9) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Met 233 (Accession # [P15328-1](#)). Predicted N-terminus: Arg 25

Molecular Characterization

FOLR1(Arg 25 - Met 233) P15328-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 53.3 kDa. The protein migrates as 60-70 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

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.1 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.

Storage

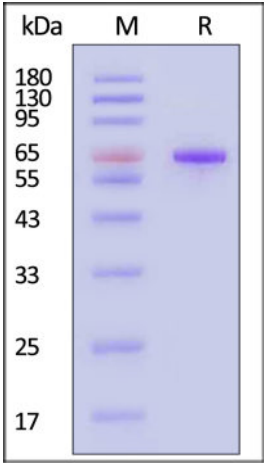
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

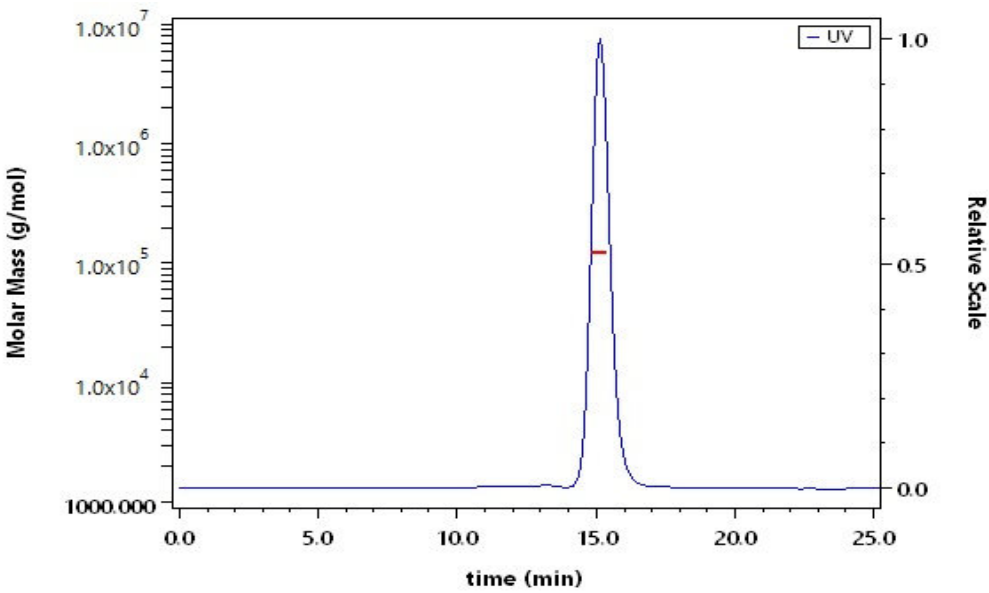
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human FOLR1, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS

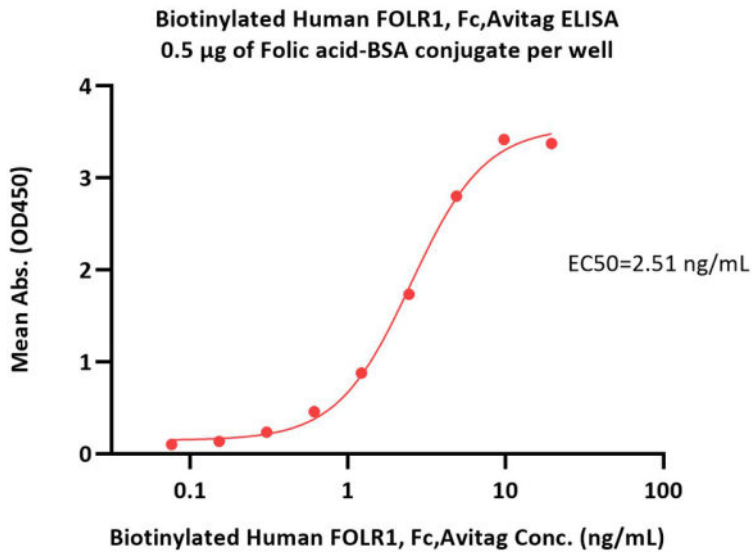


The purity of Biotinylated Human FOLR1, Fc,Avitag (Cat. No. FO1-H82F9) is more than 95% and the molecular weight of this protein is around 120-140 kDa verified by SEC-MALS.

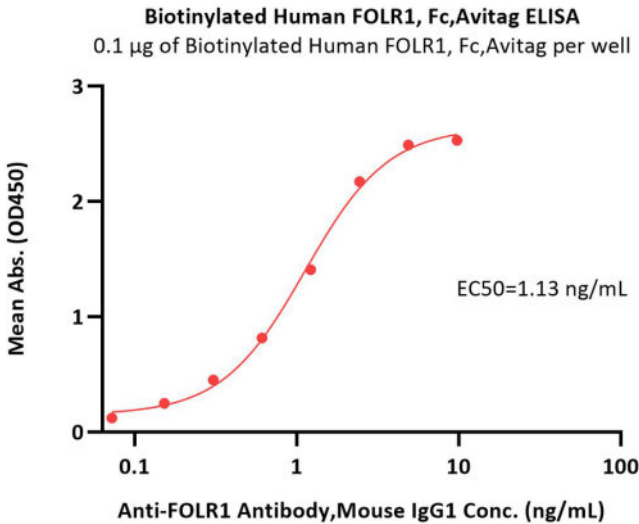
[Report](#)

Bioactivity-ELISA

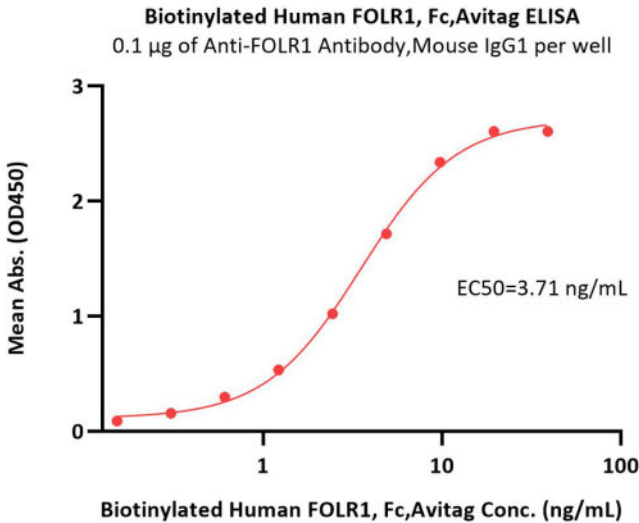




Immobilized Folic acid-BSA conjugate at 5 µg/mL (100 µL/well) can bind Biotinylated Human FOLR1, Fc,Avitag (Cat. No. FO1-H82F9) with a linear range of 0.2-5 ng/mL (QC tested).

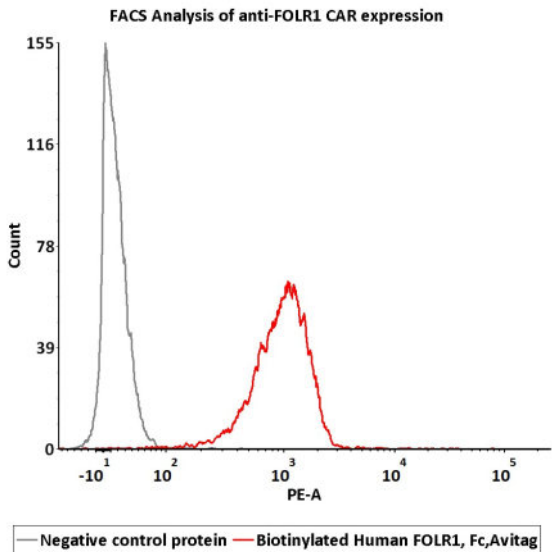


Immobilized Biotinylated Human FOLR1, Fc,Avitag (Cat. No. FO1-H82F9) at 1 µg/mL (100 µL/well) on streptavidin precoated (0.5µg/well) plate can bind Anti-FOLR1 Antibody, Mouse IgG1 with a linear range of 0.1-2 ng/mL (QC tested).



Immobilized Anti-FOLR1 Antibody, Mouse IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human FOLR1, Fc,Avitag (Cat. No. FO1-H82F9) with a linear range of 0.2-5 ng/mL (Routinely tested).

Bioactivity-FACS



2e5 of anti-FOLR1 CAR-293 cells were stained with 100 µL of 1 µg/mL of Biotinylated Human FOLR1, Fc,Avitag(Cat. No. FO1-H82F9) and negative





control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

Background

Folate Receptor 1 (FOLR1) is also known as Folate receptor alpha, Folate Binding Protein (FBP), FOLR, and is a member of the folate receptor (FOLR) family. Members of this gene family have a high affinity for folic acid and for several reduced folic acid derivatives, and mediate delivery of 5-methyltetrahydrofolate to the interior of cells. Mature FOLR1 is an N-glycosylated protein that is anchored to the cell surface by a GPI linkage. FOLR1 is predominantly expressed on epithelial cells and is dramatically upregulated on many carcinomas. FOLR1 is internalized to the endosomal system where it dissociates from its ligand before recycling to the cell surface. A soluble form of FOLR1 can be proteolytically shed from the cell surface into the serum and breast milk. Defects in FOLR1 are the cause of neurodegeneration due to cerebral folate transport deficiency (NCFTD). NCFTD is an autosomal recessive disorder resulting from brain-specific folate deficiency early in life.

