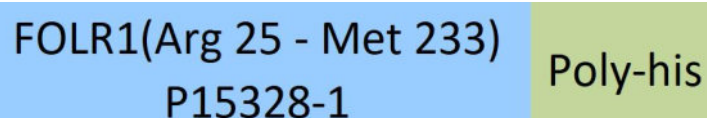


SynonymFOLR-1,FBP,FOLR,FR α **Source**

FITC-Labeled Human FOLR1, His Tag (FO1-HF2H8) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Met 233 (Accession # [P15328-1](#)).

It is the FITC labeled form of Human FOLR1, His Tag (FO1-H52H1).

Predicted N-terminus: Arg 25

Molecular Characterization


This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 26.5 kDa. The protein migrates as 35-43 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 1.5-3.5.

Endotoxin

Less than 1.0 EU per μ g by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μ m 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.

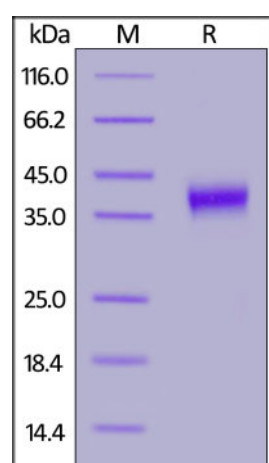
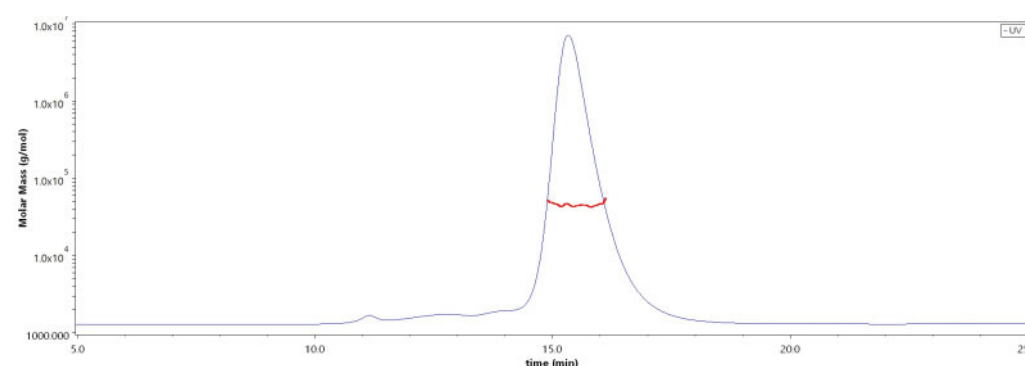
Storage

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

Please protect from light and 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.

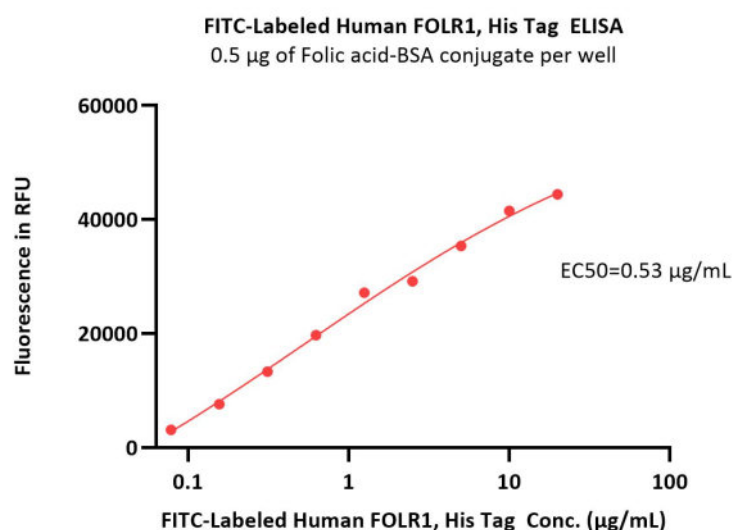
SDS-PAGE**SEC-MALS**

FITC-Labeled Human FOLR1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

The purity of FITC-Labeled Human FOLR1, His Tag (Cat. No. FO1-HF2H8) is more than 90% and the molecular weight of this protein is around 40-50 kDa verified by SEC-MALS.

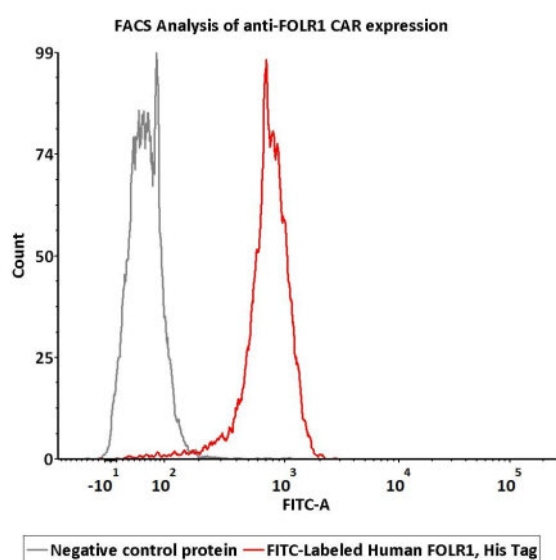
[Report](#)

Bioactivity-ELISA



Immobilized Folic acid-BSA conjugate at 5 µg/mL (100 µL/well) can bind FITC-Labeled Human FOLR1, His Tag (Cat. No. FO1-HF2H8) with a linear range of 0.078-1.25 µg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-FOLR1 CAR-293 cells were stained with 100 µL of 3 µg/mL of FITC-Labeled Human FOLR1, His Tag (Cat. No. FO1-HF2H8) and negative control protein respectively, FITC signals was used to evaluate the binding activity (QC 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.

Clinical and Translational Updates

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