

Synonym

FOLR-1,FBP,FOLR,FRα

Source

Human FOLR1, His Tag(FO1-H52H1) 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

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.5 kDa. The protein migrates as 32-40 KDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 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 50 mM Tris, 100 mM Glycine, pH7.5 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

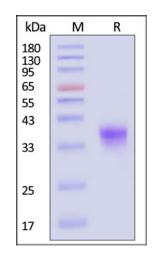
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

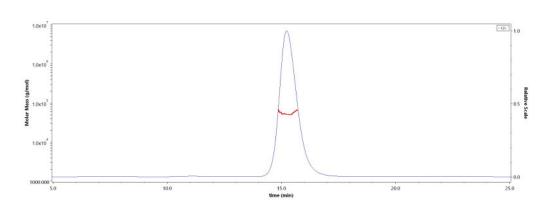
SDS-PAGE



Human 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% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

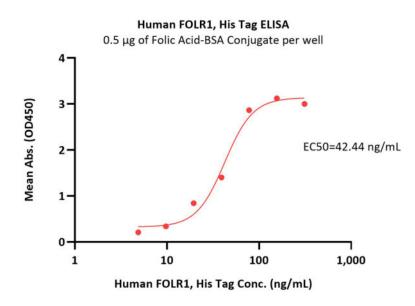
SEC-MALS



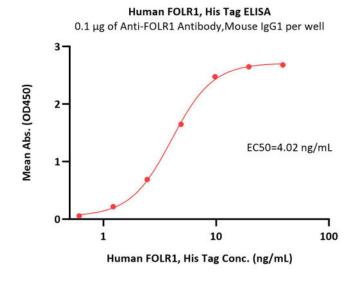
The purity of Human FOLR1, His Tag (Cat. No. FO1-H52H1) is more than 95% and the molecular weight of this protein is around 34-55 kDa verified by SEC-MALS.

Report



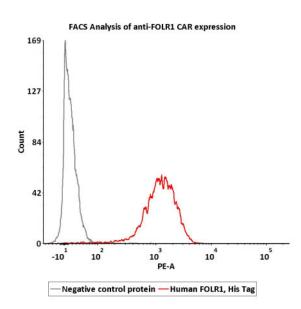


Immobilized Folic Acid-BSA Conjugate at 5 μ g/mL (100 μ L/well) can bind Human FOLR1, His Tag (Cat. No. FO1-H52H1) with a linear range of 5-78 ng/mL (QC tested).

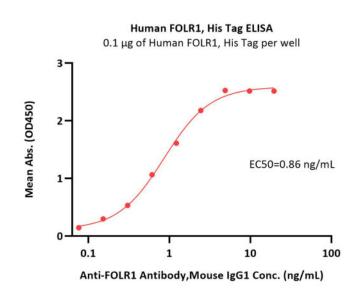


Immobilized Anti-FOLR1 Antibody, Mouse IgG1 at 1 μ g/mL (100 μ L/well) can bind Human FOLR1, His Tag (Cat. No. FO1-H52H1) with a linear range of 1-5 ng/mL (Routinely tested).

Bioactivity-FACS



2e5 of Anti-FOLR1 CAR-293 cells were stained with 100 μ L of 0.3 μ g/mL of Human FOLR1, His Tag (Cat. No. FO1-H52H1) and negative control protein respectively, washed and then followed by PE anti-His antibody and analyzed with FACS (Routinely tested).



Immobilized Human FOLR1, His Tag (Cat. No. FO1-H52H1) at 1 μ g/mL (100 μ L/well) can bind Anti-FOLR1 Antibody,Mouse IgG1 with a linear range of 0.2-1 ng/mL (QC tested).



Human FOLR1 Protein, His Tag (MALS verified)

Catalog # FO1-H52H1



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

