Human FOLR1 Protein, Twin-Strep Tag

Catalog # FO1-H528b

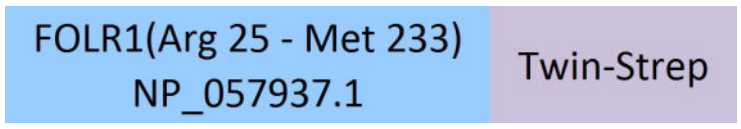
Synonym

FOLR-1,FBP,FOLR,FRα

Source

Human FOLR1 Protein, Twin-Strep Tag(FO1-H528b) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Met 233 (Accession # NP_057937.1).
Predicted N-terminus: Arg 25

Molecular Characterization



This protein carries a twin strep tag at the C-terminus.

The protein has a calculated MW of 27.6 kDa. The protein migrates as 33-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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

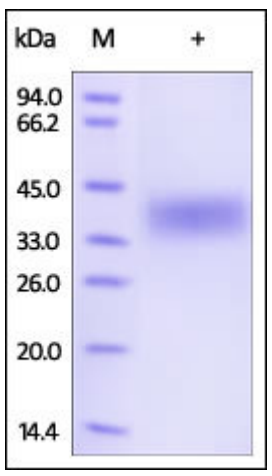
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

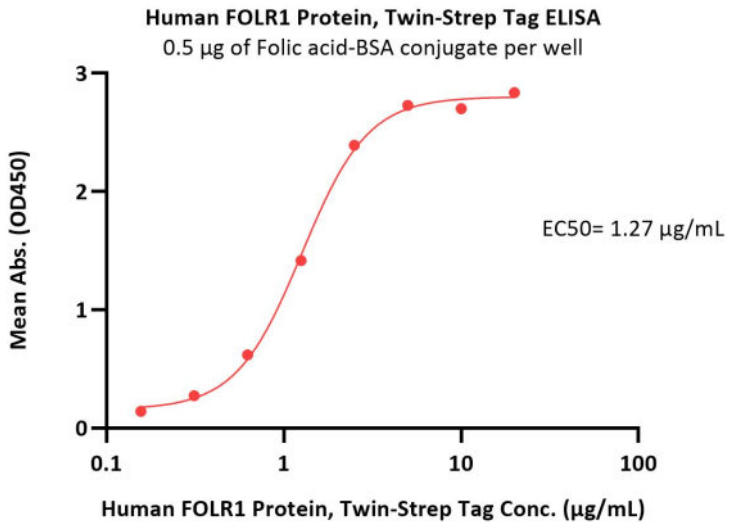
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

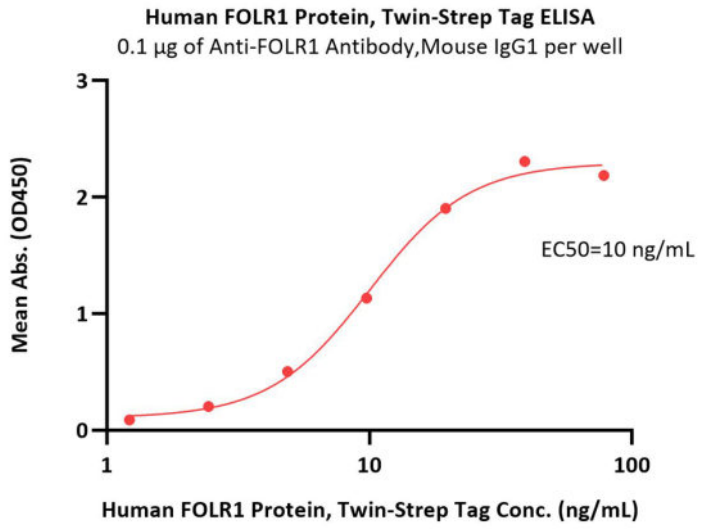


Human FOLR1 Protein, Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Folic acid-BSA conjugate at 5 μg/mL (100 μL/well) can bind Human FOLR1 Protein, Twin-Strep Tag (Cat. No. FO1-H528b) with a linear range of 0.156-2.5 μg/mL (QC tested).



Immobilized Anti-FOLR1 Antibody,Mouse IgG1 at 1 μg/mL (100 μL/well) can bind Human FOLR1 Protein, Twin-Strep Tag (Cat. No. FO1-H528b) with a linear range of 1-20 ng/mL (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.

Clinical and Translational Updates