

Human FOLR2 Protein, His Tag

Catalog # FO2-H5223



Synonym

FOLR2,BETA-HFR,FBP,PL-1,FR-BETA,FR-P3,FBP

Source

Human FOLR2, His Tag(FO2-H5223) is expressed from human 293 cells (HEK293). It contains AA Thr 17 - His 228 (Accession # [P14207-1](#)).
Predicted N-terminus: Thr 17

Molecular Characterization

FOLR2(Thr 17 - His 228)
P14207-1

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 30-35 kDa under reducing (R) condition (SDS-PAGE) due to N-linked glycosylation which has been verified by PNGase F digestion.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris and 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

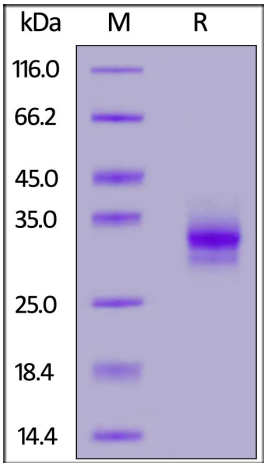
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



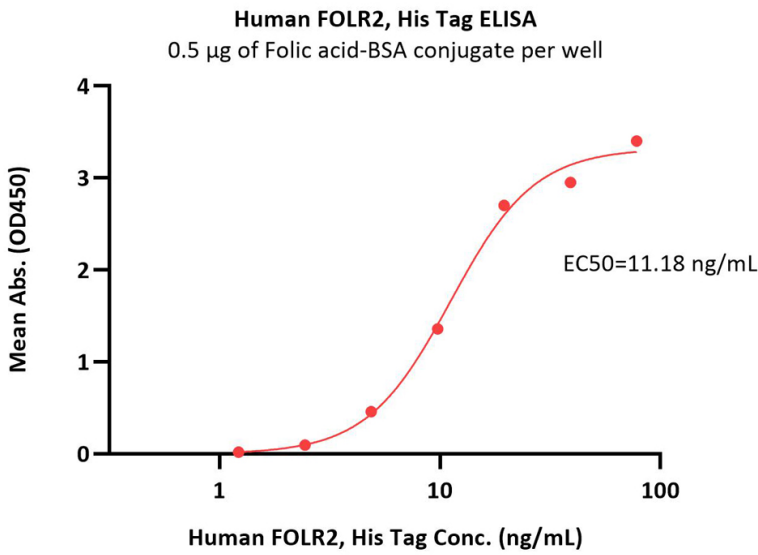
Human FOLR2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



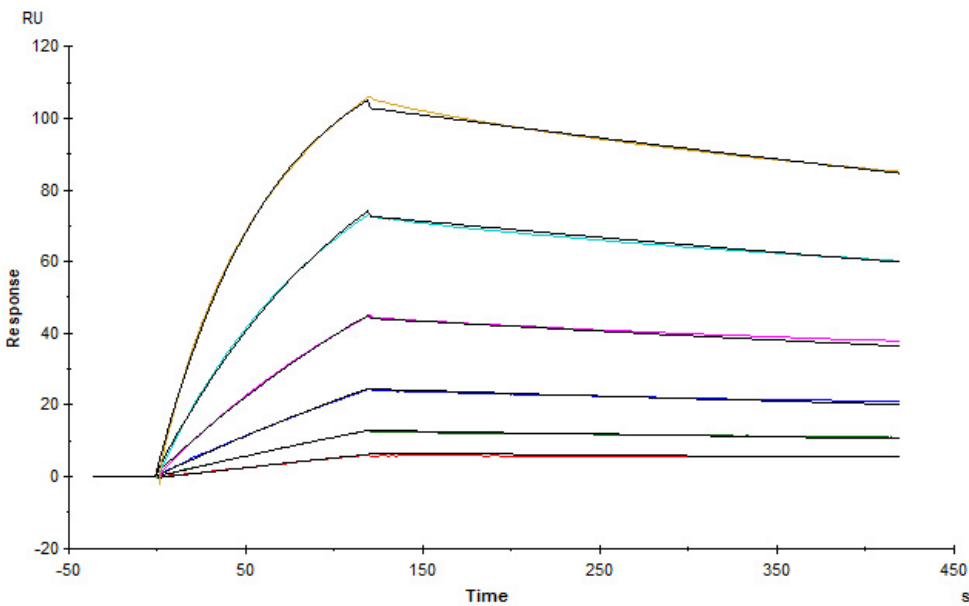
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Immobilized Folic acid-BSA conjugate at 5 µg/mL (100 µL/well) can bind Human FOLR2, His Tag (Cat. No. FO2-H5223) with a linear range of 2-20 ng/mL (QC tested).

Bioactivity-SPR



Immobilized Folic acid-BSA on CM5 Chip can bind Human FOLR2 Protein, His Tag (Cat. No. FO2-H5223) with an affinity constant of 2.14 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Background

Folate receptor beta is also known as Folate receptor 2, FBP, FOLR2, BETA-HFR, FBP/PL-1, FR-BETA, FR-P3, and is a member of the folate receptor (FOLR) family. and mediate delivery of 5-methyltetrahydrofolate to the interior of cells. This protein has a 68% and 79% sequence homology with the FOLR1 and FOLR3 proteins, respectively. The FOLR2 protein was originally thought to exist only in placenta, but is also detected in spleen, bone marrow, and thymus. FOLR2 is predominantly expressed in placenta, cells of the neutrophilic lineage, and some CD34+ hematopoietic progenitor cells. It is upregulated on myeloid leukemias, head and neck squamous cell carcinomas, and several nonepithelial cancers. It is also upregulated on macrophages and monocytes at chronic inflammatory sites including rheumatoid arthritis synovium and glioblastoma. FOLR2 is a marker for macrophages generated in the presence of M-CSF, but not GM-CSF. Its expression correlates with increased folate uptake ability. Folate conjugates of therapeutic drugs are a potential immunotherapy tool to target tumor-associated macrophages.

