

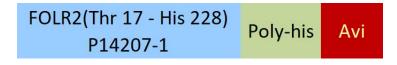
Synonym

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

Source

Biotinylated Human FOLR2, His,Avitag(FO2-H82E8) is expressed from human 293 cells (HEK293). It contains AA Thr 17 - His 228 (Accession # P14207-1). Predicted N-terminus: Thr 17

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM)

The protein has a calculated MW of 28.2 kDa. The protein migrates as 30-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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 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

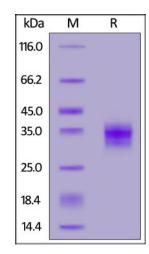
For long term storage, the product should be stored at lyophilized state at -20° C or lower.

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.

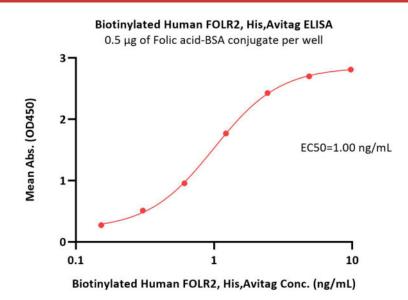
SDS-PAGE



Biotinylated Human FOLR2, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

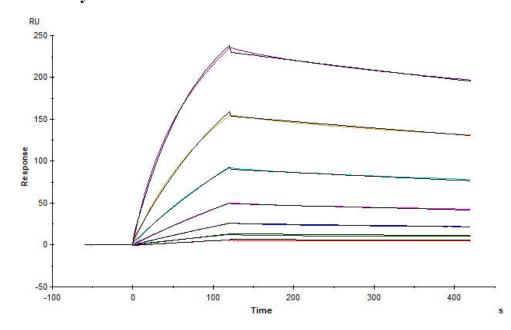
Bioactivity-ELISA





Immobilized Folic acid-BSA conjugate at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human FOLR2, His,Avitag (Cat. No. FO2-H82E8) with a linear range of 0.2-1 ng/mL (QC tested).

Bioactivity-SPR



Immobilized Folic acid-BSA on CM5 Chip can bind Biotinylated Human FOLR2, His, Avitag (Cat. No. FO2-H82E8) with an affinity constant of 4.61 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.

Clinical and Translational Updates

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