Catalog # FO1-C52H8



#### Synonym

FOLR-1,FBP,FOLR,FRa

#### Source

Cynomolgus / Rhesus macaque FOLR1, His Tag (FO1-C52H8) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Met 233 (Accession # <u>NP\_001181576.1</u>). In the region Arg 25 - Met 233, the AA sequence of Cynomolgus and Rhesus macaque FOLR1 are homologus. Predicted N-terminus: Arg 25

# **Molecular Characterization**

FOLR1(Arg 25 - Met 233) NP\_001181576.1

Poly-his

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

The protein has a calculated MW of 26.4 kDa. The protein migrates as 32-41 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

# Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Lyophilized from 0.22  $\mu$ m 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

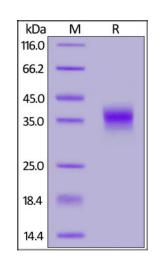
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

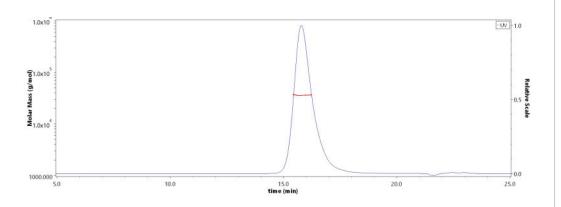
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Cynomolgus / Rhesus macaque 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 90%.

# SEC-MALS



The purity of Cynomolgus / Rhesus macaque FOLR1, His Tag (Cat. No. FO1-C52H8) is more than 90% and the molecular weight of this protein is around 30-50 kDa verified by SEC-MALS.

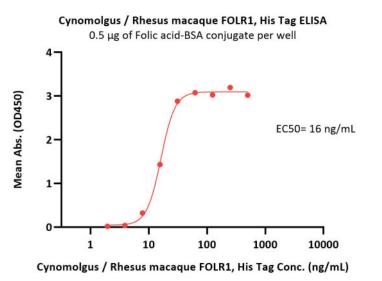


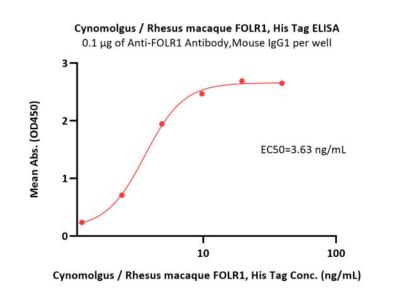
**Bioactivity-ELISA** 



# Cynomolgus / Rhesus macaque FOLR1 Protein, His tag (MALS verified)

Catalog # FO1-C52H8





Immobilized Anti-FOLR1 Antibody, Mouse IgG1 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Cynomolgus / Rhesus macaque FOLR1, His Tag (Cat. No. FO1-C52H8) with a linear range of 1-5 ng/mL (Routinely tested).

Cynomolgus / Rhesus macaque FOLR1 Protein, His tag (Cat. No. FO1-C52H8) with a linear range of 8-32 ng/mL (QC tested).

Immobilized Folic acid-BSA conjugate at 5 µg/mL (100 µL/well) can bind

#### 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**

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