

# Biotinylated Human FOLR1 Protein

Cat. No. FOL-HM4R1B

## Description

<b>Source</b>	Recombinant Biotinylated Human FOLR1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Arg25-Met233.
<b>Accession</b>	P15328
<b>Molecular Weight</b>	The protein has a predicted MW of 27.5 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

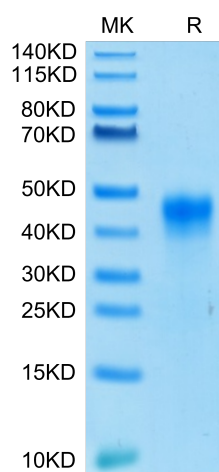
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Folate Receptor 1 (FOLR1), also known as Folate Receptor alpha and Folate Binding Protein (FBP), is a 37 - 42 kDa protein that mediates the cellular uptake of folic acid and reduced folates. Dietary folates are required for many key metabolic processes including nucleotide and methionine synthesis, the interconversion of glycine and serine, and histidine breakdown. FOLR1 binds to folate and reduced folic acid derivatives and mediates delivery of 5-methyltetrahydrofolate and folate analogs into the interior of cells. Has high affinity for folate and folic acid analogs at neutral pH.

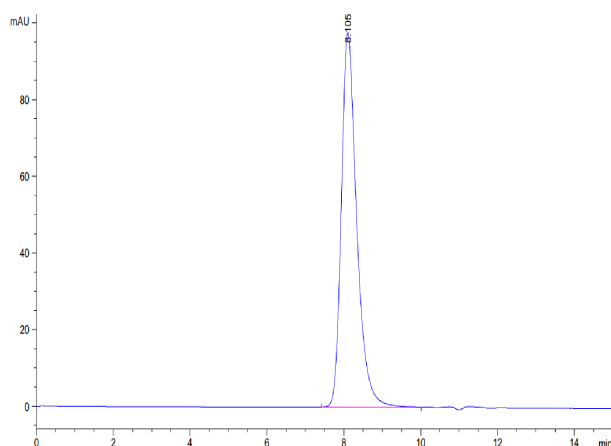
## Assay Data

### Bis-Tris PAGE



Biotinylated Human FOLR1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



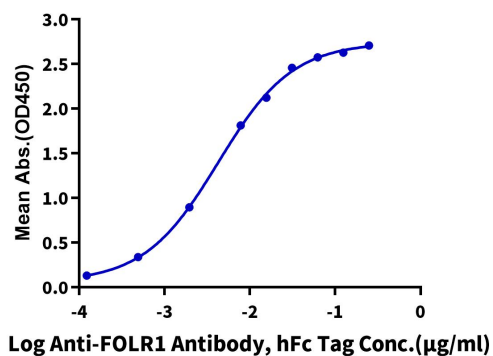
The purity of Biotinylated Human FOLR1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

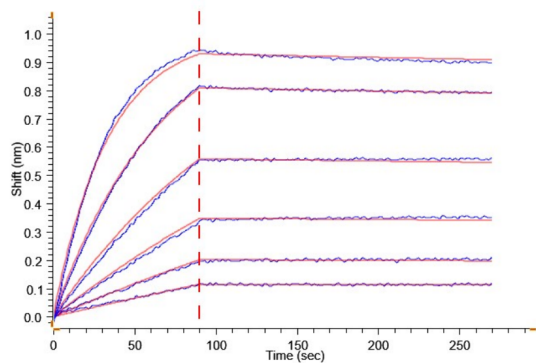
**Biotinylated Human FOLR1, His-Avi Tag ELISA**

0.05µg Biotinylated Human FOLR1, His-Avi Tag Per Well



Immobilized Biotinylated Human FOLR1, His-Avi Tag at 0.5µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for Anti-FOLR1 Antibody, hFc Tag with the EC50 of 4.3ng/ml determined by ELISA.

BLI Data



Loaded Anti-FOLR1 Ab., hFc-Avi Tag on ProA-Biosensor can bind Biotinylated Human FOLR1, His-Avi Tag with an affinity constant of 0.42 nM as determined in BLI assay (Gator® Prime).