

## FOLR1

Catalog # PVGS1791

## **Product Information**

Primary Accession P15328
Species Human

Sequence Arg25-Met233

**Purity** > 95% as determined by Bis-Tris PAGE

> 95% as determined by HPLC

**Endotoxin Level** Less than 1EU per g by the LAL method.

Biological Activity Immobilized FOLR1 hFc Chimera, Human (Cat.No.: Z03925) at 0.5 [g/ml(100

□/Well) on the plate can bind Biotinylated Anti-FOLR1 Antibody, hFc Tag

Expression System HEK293

Theoretical Molecular Weight 51.3 kDa

**Formulation** Lyophilized from a 0.22 Im filtered solution in PBS, pH 7.4.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

 $ddH_2O$  more than 100  $\square g/ml$ .

**Storage & Stability** Upon receiving, the product remains stable up to 6 months at -20 °C or below.

Upon reconstitution, the product should be stable for 3 months at -80 °C.

Avoid repeated freeze-thaw cycles.

## **Additional Information**

**Gene ID** 2348

**Other Names** Folate receptor alpha, FR-alpha, Adult folate-binding protein, FBP, Folate

receptor 1, Folate receptor, adult, KB cells FBP, Ovarian tumor-associated

antigen MOv18, FOLR1, FOLR

**Target 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.

## **Protein Information**

Name FOLR1

Synonyms FOLR

**Function** Binds to folate and reduced folic acid derivatives and mediates delivery of

5-methyltetrahydrofolate and folate analogs into the interior of cells

(PubMed: 19074442, PubMed: 23851396, PubMed: 23934049,

PubMed: <u>2527252</u>, PubMed: <u>8033114</u>, PubMed: <u>8567728</u>). Has high affinity for

folate and folic acid analogs at neutral pH (PubMed:23851396,

PubMed:23934049, PubMed:2527252, PubMed:8033114, PubMed:8567728).

Exposure to slightly acidic pH after receptor endocytosis triggers a conformation change that strongly reduces its affinity for folates and mediates their release (PubMed:8567728). Required for normal embryonic

development and normal cell proliferation (By similarity).

**Cellular Location** Cell membrane; Lipid-anchor, GPI-anchor Apical cell membrane; Lipid-anchor,

GPI- anchor Basolateral cell membrane; Lipid-anchor, GPI-like-anchor. Secreted Cytoplasmic vesicle. Cytoplasmic vesicle, clathrin-coated vesicle. Endosome. Note=Endocytosed into cytoplasmic vesicles and then recycled to

the cell membrane

**Tissue Location** Primarily expressed in tissues of epithelial origin. Expression is increased in

malignant tissues. Expressed in kidney, lung and cerebellum. Detected in

placenta and thymus epithelium.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.