

# FOLR1

Catalog # PVGS1759

### Specification

# **FOLR1 - Product Information**

Primary Accession Species Mouse <u>P35846</u>

Sequence Thr25-Ser232

**Purity** > 95% as determined by Bis-Tris PAGE<br/> > 95% as determined by HPLC

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

Expression System HEK293

Theoretical Molecular Weight 25.36 kDa

Formulation

Reconstitution

Lyophilized from a 0.22  $\mu m$  filtered solution in PBS, pH 7.4 .

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<sub>2</sub>0 more than 100  $\mu$ 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.

### **FOLR1 - Additional Information**

Gene ID 14275

**Other Names** Folate receptor alpha, FR-alpha, Folate receptor 1, Folate-binding protein 1, Folr1, Fbp1, Folbp1

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.

# **FOLR1 - Protein Information**

Name Folr1

Synonyms Fbp1, Folbp1

#### Function

Binds to folate and reduced folic acid derivatives and mediates delivery of 5-methyltetrahydrofolate and folate analogs into the interior of cells (PubMed:<a href="http://www.uniprot.org/citations/1894617" target="\_blank">1894617</a>). Has high affinity for folate and folic acid analogs at neutral pH (By similarity). Exposure to slightly acidic pH after receptor endocytosis triggers a conformation change that strongly reduces its affinity for folates and mediates their release (By similarity). Required for normal embryonic development and normal cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/10508523" target="\_blank">10508523</a>, PubMed:<a href="http://www.uniprot.org/citations/10508523" target="\_blank">12854656</a>, PubMed:<a href="http://www.uniprot.org/citations/12559034" target="\_blank">12854656</a>, PubMed:<a href="http://www.uniprot.org/citations/15259034" target="\_blank">17286298</a>). Required for renal folate reabsorption (PubMed:<a href="http://www.uniprot.org/citations/17286298" target="\_blank">15703271</a>).

#### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P15328}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P15328}. Apical cell membrane {ECO:0000250|UniProtKB:P15328}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P15328}. Basolateral cell membrane {ECO:0000250|UniProtKB:P15328}; Lipid-anchor, GPI-like-anchor {ECO:0000250|UniProtKB:P15328}. Secreted {ECO:0000250|UniProtKB:P15328}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P15328}. Cytoplasmic vesicle, clathrin-coated vesicle {ECO:0000250|UniProtKB:P15328}. Endosome {ECO:0000250|UniProtKB:P15328}. Note=Endocytosed into cytoplasmic vesicles and then recycled to the cell membrane {ECO:0000250|UniProtKB:P15328}

#### **Tissue Location**

Detected in kidney proximal tubules (at protein level).

#### FOLR1 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### FOLR1 - Images