

FOLR1 Catalog # PVGS1759

Product Information

Primary Accession Species	P35846 Mouse
Sequence	Thr25-Ser232
Purity	> 95% as determined by Bis-Tris PAGE> 95% as determined by HPLC
Endotoxin Level	Less than 1EU per Ig by the LAL method.
Expression System	HEK293
Theoretical Molecular Weight	25.36 kDa
Formulation Reconstitution	Lyophilized from a 0.22 Im 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 ₂ O more than 100 Ig/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	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.

Protein Information

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: <u>1894617</u>). 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: <u>10508523</u> , PubMed: <u>12854656</u> , PubMed: <u>15259034</u> , PubMed: <u>17286298</u>). Required for renal folate reabsorption (PubMed: <u>15703271</u>).
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}. 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).

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