10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FOLR1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10693a

Product Information

Application	FC, WB, IHC-P-Leica, E
Primary Accession	P15328
Other Accession	O15254, NP_000793.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29819
Antigen Region	33-68

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/Specificity	This FOLR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-68 amino acids from the N-terminal region of human FOLR1.
Dilution	FC~~1:10~50 WB~~1:1000 IHC-P-Leica~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FOLR1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

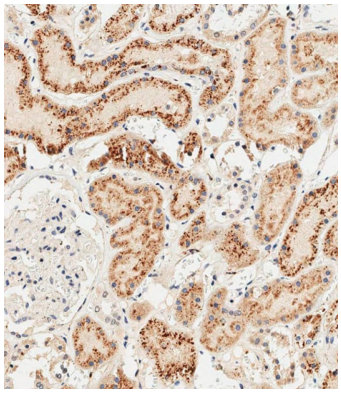
Background

The protein encoded by this gene is a member of the folate receptor family. Members of this gene family bind folic acid and its reduced derivatives, and transport 5-methyltetrahydrofolate into cells. This gene product is a secreted protein that either anchors to membranes via a glycosyl-phosphatidylinositol linkage or exists in a soluble form. Mutations in this gene have been associated with neurodegeneration due to cerebral folate transport deficiency. Due to the presence of two promoters, multiple transcription start sites, and alternative splicing, multiple transcript variants encoding the same protein have been found for this gene.

References

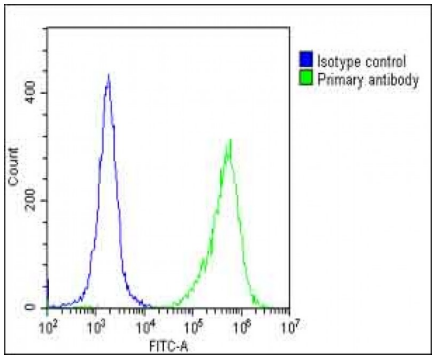
Sivakumaran, S., et al. J. Steroid Biochem. Mol. Biol. 122(5):333-340(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
O'Byrne, M.R., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(8):689-694(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Elwood, P.C., et al. Biochemistry 36(6):1467-1478(1997)

Images

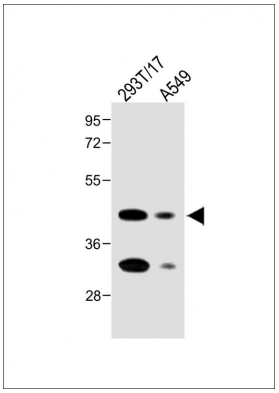


Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP10693A performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/2000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Overlay histogram showing HeLa cells stained with AP10693A(green line). The cells were fixed with 2%



paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP10693A, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-FOLR1 Antibody (N-term) at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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