

FOLR1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10693a

Specification

FOLR1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P-Leica, FC,E <u>P15328</u> <u>O15254</u>, <u>NP_000793.1</u> Human Rabbit Polyclonal Rabbit IgG 33-68

FOLR1 Antibody (N-term) - 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 WB~~1:2000 IHC-P-Leica~~1:1000 FC~~1:25

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.

FOLR1 Antibody (N-term) - 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:<u>19074442</u>, PubMed:<u>23851396</u>, PubMed:<u>23934049</u>, 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:<u>23851396</u>, PubMed:<u>23934049</u>, PubMed:<u>2527252</u>, PubMed:<u>8033114</u>, PubMed:<u>23851396</u>, PubMed:<u>23934049</u>, PubMed:<u>2527252</u>, PubMed:<u>8033114</u>, PubMed:<u>8567728</u>). Exposure to slightly acidic pH after receptor endocytosis triggers a conformation change that strongly reduces its affinity for folates and mediates their release (PubMed:<u>8567728</u>). 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

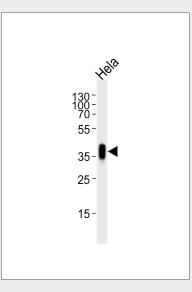
Primarily expressed in tissues of epithelial origin. Expression is increased in malignant tissues. Expressed in kidney, lung and cerebellum. Detected in placenta and thymus epithelium.

FOLR1 Antibody (N-term) - Protocols

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

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

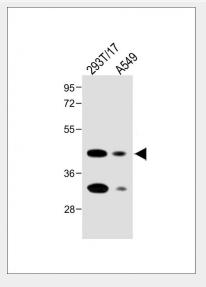
FOLR1 Antibody (N-term) - Images



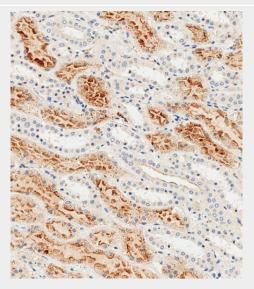
Western blot analysis of lysate from Hela cell line, using FOLR1 Antibody (N-term)(Cat.



#AP10693a). AP10693a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

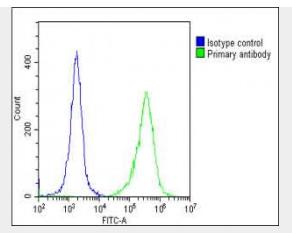


All lanes : Anti-FOLR1 Antibody (N-term) at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5%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



Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP10693A performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/1000) 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 37°C. The secondary antibody used was Goat-Anti-Rabbit lgG, **DyLight**® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG ($1\mu g/1 \times 10^{6}$ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

FOLR1 Antibody (N-term) - 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.

FOLR1 Antibody (N-term) - 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)