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Anti-SLC19A1 Picoband Antibody

Catalog # ABO12192

Product Information

Application	WB
Primary Accession	P41440
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Folate transporter 1(SLC19A1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6573
Other Names	Folate transporter 1, FOLT, Intestinal folate carrier 1, IFC-1, Placental folate transporter, Reduced folate carrier protein, RFC, Solute carrier family 19 member 1, SLC19A1, FLOT1, RFC1
Calculated MW	64868
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Membrane; Multi-pass membrane protein.
Tissue Specificity	Placenta, liver, and to a much smaller extent, in lung.
Source	Eukaryota
Protein Name	Folate transporter 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human SLC19A1 (202-231aa FLKRPKRSLFFNRDDRGRCETSASELERMN).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

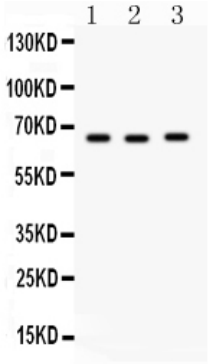
Protein Information

Name	SLC19A1 (HGNC:10937)
Function	Antiporter that mediates the import of reduced folates or a subset of cyclic dinucleotides, driven by the export of organic anions (PubMed:10787414, PubMed:15337749, PubMed:16115875, PubMed:22554803, PubMed:31126740, PubMed:31511694, PubMed:32276275, PubMed:36071163, PubMed:36265513, PubMed:36575193, PubMed:7826387, PubMed:9041240). Acts as an importer of immunoreactive cyclic dinucleotides, such as cyclic GMP-AMP (2'-3'-cGAMP), an immune messenger produced in response to DNA virus in the cytosol, and its linkage isomer 3'-3'-cGAMP, thus playing a role in triggering larger immune responses (PubMed:31126740, PubMed:31511694, PubMed:36745868). Mechanistically, acts as a secondary active transporter, which exports intracellular organic anions down their concentration gradients to facilitate the uptake of its substrates (PubMed:22554803, PubMed:31126740, PubMed:31511694). Has high affinity for N5-methyltetrahydrofolate, the predominant circulating form of folate (PubMed:10787414, PubMed:14609557, PubMed:22554803, PubMed:36071163, PubMed:36265513, PubMed:36575193). Also mediates the import of antifolate drug methotrexate (PubMed:22554803, PubMed:36071163, PubMed:7615551, PubMed:7641195, PubMed:9767079). 5-amino-4-imidazolecarboxamide riboside (AICAR), when phosphorylated to AICAR monophosphate, can serve as an organic anion for antiporter activity (PubMed:22554803).
Cellular Location	Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein
Tissue Location	Placenta, liver, and to a much smaller extent, in lung.

Background

Solute carrier family 19 (folate transporter), member 1, also known as SLC19A1 or RFC1, is a protein which in humans is encoded by the SLC19A1 gene. Transport of folate compounds into mammalian cells can occur via receptor-mediated or carrier-mediated mechanisms. A functional coordination between these 2 mechanisms has been proposed to be the method of folate uptake in certain cell types. Methotrexate (MTX) is an antifolate chemotherapeutic agent that is actively transported by the carrier-mediated uptake system. And RFC1 plays a role in maintaining intracellular concentrations of folate.

Images



Anti-SLC19A1 Picoband antibody, ABO12192, Western blottingAll lanes: Anti SLC19A1 (ABO12192) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: U937 Whole Cell Lysate at 40ugLane 3: SW620 Whole Cell Lysate at 40ugPredicted bind size: 65KDObserved bind size: 65KD

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