

**Anti-SLC19A1 Picoband Antibody**  
**Catalog # ABO12192****Specification**

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**Anti-SLC19A1 Picoband Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P41440</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**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.

**Anti-SLC19A1 Picoband Antibody - 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 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Membrane; Multi-pass membrane protein.

**Tissue Specificity**

Placenta, liver, and to a much smaller extent, in lung.

**Protein Name**

Folate transporter 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human SLC19A1 (202-231aa FLKRPKRSLLFFNRDDRGRCETSASELERMN).

**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.**

## Anti-SLC19A1 Picoband Antibody - 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:[>7826387</a>, PubMed:\[>9041240</a>, PubMed:\\[>10787414</a>, PubMed:\\\[>15337749</a>, PubMed:\\\\[>16115875</a>, PubMed:\\\\\[>22554803</a>, PubMed:\\\\\\[>31511694</a>, PubMed:\\\\\\\[>31126740</a>, PubMed:\\\\\\\\[>32276275</a>\\\\\\\\\). 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</a>, PubMed:\\\\\\\\\\[>31511694</a>, PubMed:\\\\\\\\\\\[>31126740</a>\\\\\\\\\\\\). Has high affinity for N5-methyltetrahydrofolate, the predominant circulating form of folate \\\\\\\\\\\\(PubMed:\\\\\\\\\\\\[>10787414</a>, PubMed:\\\\\\\\\\\\\[>14609557</a>, PubMed:\\\\\\\\\\\\\\[>22554803</a>\\\\\\\\\\\\\\\). Also able to mediate the import of antifolate drug methotrexate \\\\\\\\\\\\\\\(PubMed:\\\\\\\\\\\\\\\[>7615551</a>, PubMed:\\\\\\\\\\\\\\\\[>7641195</a>, PubMed:\\\\\\\\\\\\\\\\\[>9767079</a>, PubMed:\\\\\\\\\\\\\\\\\\[>22554803</a>\\\\\\\\\\\\\\\\\\\). Also 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:\\\\\\\\\\\\\\\\\\\[>31511694</a>, PubMed:\\\\\\\\\\\\\\\\\\\\[>31126740</a>\\\\\\\\\\\\\\\\\\\\\). 5-amino-4-imidazolecarboxamide riboside \\\\\\\\\\\\\\\\\\\\\(AICAR\\\\\\\\\\\\\\\\\\\\\), when phosphorylated to AICAR monophosphate, can serve as an organic anion for antiporter activity \\\\\\\\\\\\\\\\\\\\\(PubMed:\\\\\\\\\\\\\\\\\\\\\[>22554803</a>\\\\\\\\\\\\\\\\\\\\\\).\\\\\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/22554803\\\\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/31126740\\\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/31511694\\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/22554803\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/9767079\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/7641195\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\(http://www.uniprot.org/citations/7615551\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\]\\\\\\\\\\\\\\(http://www.uniprot.org/citations/22554803\\\\\\\\\\\\\\)\\\\\\\\\\\\\]\\\\\\\\\\\\\(http://www.uniprot.org/citations/14609557\\\\\\\\\\\\\)\\\\\\\\\\\\]\\\\\\\\\\\\(http://www.uniprot.org/citations/10787414\\\\\\\\\\\\)\\\\\\\\\\\]\\\\\\\\\\\(http://www.uniprot.org/citations/31126740\\\\\\\\\\\)\\\\\\\\\\]\\\\\\\\\\(http://www.uniprot.org/citations/31511694\\\\\\\\\\)\\\\\\\\\]\\\\\\\\\(http://www.uniprot.org/citations/22554803\\\\\\\\\)\\\\\\\\]\\\\\\\\(http://www.uniprot.org/citations/32276275\\\\\\\\)\\\\\\\]\\\\\\\(http://www.uniprot.org/citations/31126740\\\\\\\)\\\\\\]\\\\\\(http://www.uniprot.org/citations/31511694\\\\\\)\\\\\]\\\\\(http://www.uniprot.org/citations/22554803\\\\\)\\\\]\\\\(http://www.uniprot.org/citations/16115875\\\\)\\\]\\\(http://www.uniprot.org/citations/15337749\\\)\\]\\(http://www.uniprot.org/citations/10787414\\)\]\(http://www.uniprot.org/citations/9041240\)](http://www.uniprot.org/citations/7826387)

### Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

### Tissue Location

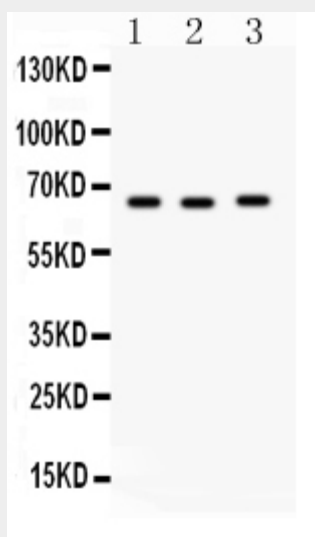
Placenta, liver, and to a much smaller extent, in lung.

## Anti-SLC19A1 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-SLC19A1 Picoband Antibody - Images



Anti-SLC19A1 Picoband antibody, ABO12192, Western blotting All lanes: Anti SLC19A1 (ABO12192) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: U937 Whole Cell Lysate at 40ug Lane 3: SW620 Whole Cell Lysate at 40ug Predicted bind size: 65KD Observed bind size: 65KD

## Anti-SLC19A1 Picoband Antibody - 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.