

**SLC5A11 / SMIT2 Antibody (Extracellular Domain)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10589****Specification****SLC5A11 / SMIT2 Antibody (Extracellular Domain) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | IHC                    |
| Primary Accession | <a href="#">Q8WWX8</a> |
| Reactivity        | Human, Monkey          |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 74kDa KDa              |

**SLC5A11 / SMIT2 Antibody (Extracellular Domain) - Additional Information****Gene ID** 115584**Other Names**

Sodium/myo-inositol cotransporter 2, Na(+)/myo-inositol cotransporter 2, Sodium-dependent glucose cotransporter, Sodium/glucose cotransporter KST1, Sodium/myo-inositol transporter 2, SMIT2, Solute carrier family 5 member 11, SLC5A11 {ECO:0000312|EMBL:EAW55781.1}

**Target/Specificity**

Human SLC5A11. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except SLC5A2 (65%), SLC5A9 (65%).

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

SLC5A11 / SMIT2 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**SLC5A11 / SMIT2 Antibody (Extracellular Domain) - Protein Information****Name** SLC5A11 ([HGNC:23091](#))**Function**

Involved in the sodium-dependent cotransport of myo-inositol (MI) with a Na(+):MI stoichiometry of 2:1 (PubMed: [15172003](http://www.uniprot.org/citations/15172003) target="\_blank">15172003</a>, PubMed: [19032932](http://www.uniprot.org/citations/19032932) target="\_blank">19032932</a>). Exclusively responsible for apical MI transport and absorption in intestine (By similarity). Can also transport D-chiro- inositol (DCI) but not L-fucose (PubMed: [15172003](http://www.uniprot.org/citations/15172003) target="\_blank">15172003</a>, PubMed: [19032932](http://www.uniprot.org/citations/19032932) target="\_blank">19032932</a>). Exhibits stereospecific cotransport of both D-glucose and D-xylose (By similarity). May induce apoptosis through the TNF-alpha, PDCD1 pathway (PubMed: [15172003](http://www.uniprot.org/citations/15172003) target="\_blank">15172003</a>, PubMed: [19032932](http://www.uniprot.org/citations/19032932) target="\_blank">19032932</a>).

<http://www.uniprot.org/citations/18069935> (18069935). May play a role in the regulation of MI concentration in serum, involving reabsorption in at least the proximal tubule of the kidney (By similarity).

#### Cellular Location

Membrane; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:Q9Z1F2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9Z1F2}. Note=Located on apical membrane of enterocytes (By similarity). Located on membrane of kidney brush border membrane vesicles (BBMVs) and apical membrane of proximal convoluted tubules (By similarity). {ECO:0000250|UniProtKB:Q28728, ECO:0000250|UniProtKB:Q9Z1F2}

#### Tissue Location

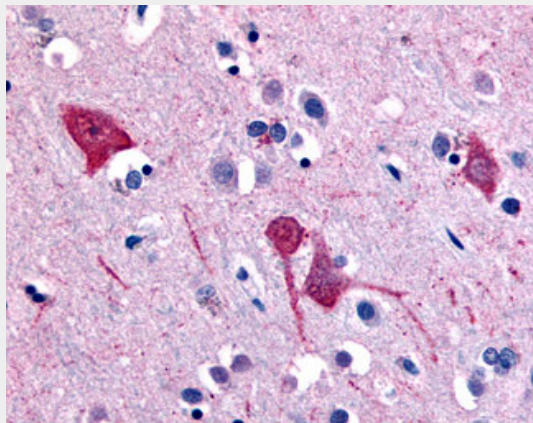
Highest expression in heart, skeletal muscle, kidney, liver and placenta. Weaker expression in brain, colon, spleen, lung and peripheral blood leukocytes.

### SLC5A11 / SMIT2 Antibody (Extracellular Domain) - 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](#)

### SLC5A11 / SMIT2 Antibody (Extracellular Domain) - Images



Anti-SLC5A11 antibody ALS10589 IHC of human brain, cortex.

### SLC5A11 / SMIT2 Antibody (Extracellular Domain) - Background

Involved in the sodium-dependent cotransport of myo- inositol (MI) with a Na(+):MI stoichiometry of 2:1. Exclusively responsible for apical MI transport and absorption in intestine. Also can transport D-chiro-inositol (DCI) but not L-fructose. Exhibits stereospecific cotransport of both D-glucose and D-xylose. May induce apoptosis through the TNF-alpha, PDCD1 pathway. May play a role in the regulation of MI concentration in serum, involving reabsorption in at least the proximal tubule of the kidney.

**SLC5A11 / SMIT2 Antibody (Extracellular Domain) - References**

Roll P.,et al.Gene 285:141-148(2002).

Mount D.B.,et al.Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.

Bruss M.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Martin J.,et al.Nature 432:988-994(2004).