

**Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab)  
Recombinant Antibody  
Catalog # APR10209****Specification****Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">Q15758</a>
Reactivity	Cynomolgus, Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	146.2 KDa

**Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) - Additional Information****Target/Specificity**  
SLC1A5 / ASCT2**Endotoxin**  
< 0.001EU/ µg, determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.**Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) - Protein Information****Name** SLC1A5 {ECO:0000303|PubMed:23756778}**Function**  
Sodium-coupled antiporter of neutral amino acids. In a tri- substrate transport cycle, exchanges neutral amino acids between the extracellular and intracellular compartments, coupled to the inward cotransport of at least one sodium ion (PubMed:<a href="http://www.uniprot.org/citations/17094966" target="\_blank">17094966</a>, PubMed:<a href="http://www.uniprot.org/citations/23756778" target="\_blank">23756778</a>, PubMed:<a href="http://www.uniprot.org/citations/26492990" target="\_blank">26492990</a>, PubMed:<a href="http://www.uniprot.org/citations/29872227" target="\_blank">29872227</a>, PubMed:<a href="http://www.uniprot.org/citations/34741534" target="\_blank">34741534</a>, PubMed:<a href="http://www.uniprot.org/citations/8702519" target="\_blank">8702519</a>). The preferred substrate is the essential amino acid L- glutamine, a precursor for biosynthesis of proteins, nucleotides and amine sugars as well as an alternative fuel for mitochondrial oxidative phosphorylation. Exchanges L-glutamine with other neutral amino acids such as L-serine,

L-threonine and L-asparagine in a bidirectional way. Provides L-glutamine to proliferating stem and activated cells driving the metabolic switch toward cell differentiation (PubMed:<a href="http://www.uniprot.org/citations/23756778" target="\_blank">23756778</a>, PubMed:<a href="http://www.uniprot.org/citations/24953180" target="\_blank">24953180</a>). The transport cycle is usually pH-independent, with the exception of L-glutamate. Transports extracellular L-glutamate coupled to the cotransport of one proton and one sodium ion in exchange for intracellular L-glutamine counter-ion. May provide for L-glutamate uptake in glial cells regulating glutamine/glutamate cycle in the nervous system (PubMed:<a href="http://www.uniprot.org/citations/32733894" target="\_blank">32733894</a>). Can transport D-amino acids. Mediates D-serine release from the retinal glia potentially affecting NMDA receptor function in retinal neurons (PubMed:<a href="http://www.uniprot.org/citations/17094966" target="\_blank">17094966</a>). Displays sodium- and amino acid-dependent but uncoupled channel-like anion conductance with a preference SCN(-) >> NO3(-) > I(-) > Cl(-) (By similarity). Through binding of the fusogenic protein syncytin-1/ERVW-1 may mediate trophoblasts syncytialization, the spontaneous fusion of their plasma membranes, an essential process in placental development (PubMed:<a href="http://www.uniprot.org/citations/10708449" target="\_blank">10708449</a>, PubMed:<a href="http://www.uniprot.org/citations/23492904" target="\_blank">23492904</a>).

#### Cellular Location

Cell membrane; Multi-pass membrane protein. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

#### Tissue Location

Placenta, lung, skeletal muscle, kidney, pancreas, and intestine (PubMed:8702519). Expressed in CD34-positive hematopoietic progenitors (at protein level) (PubMed:24953180)

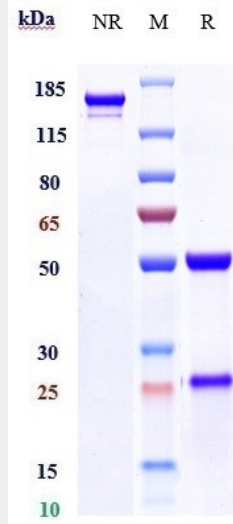
### Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) - Protocols

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

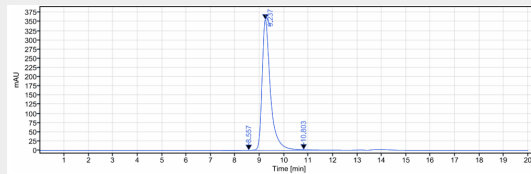
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) - Images

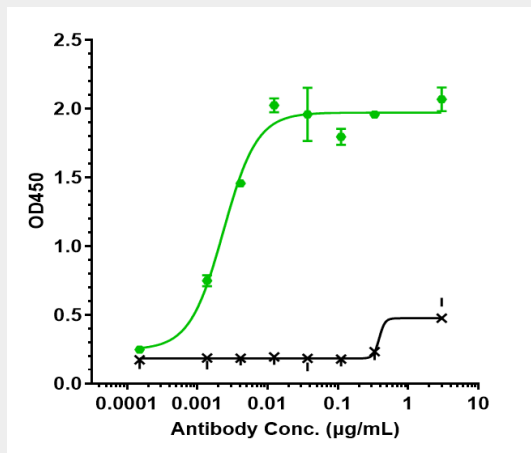




Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab) is more than 99.15%, determined by SEC-HPLC.



Immobilized human SLC1A5 293 VLP at 16 µg/mL can bind Anti-SLC1A5 / ASCT2 Reference Antibody (idactamab)  $EC_{50} = 0.002341$  µg/mL