

DATASHEET

ASCT1 Rabbit Polyclonal Antibody

CAT. NO. APA12695

KEY FEATURES

Target	ASCT1	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

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 . Exchanges neutral amino acids such as L- and D-serine, L-threonine, L-asparagine and L-alanine in a bidirectional way . Involved in homeostasis of D-serine, a coagonist of synaptic NMDA receptors. In astrocytes at excitatory synapses, mediates electrogenic D-serine influx coupled to L-serine efflux and L-serine shuttling to neurons for de novo D-serine synthesis . Displays sodium- and amino acid-dependent but uncoupled channel-like anion conductance with a preference SCN(-) > NO3(-) > I(-) > Cl(-) .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to ASCT1
Specificity	Recognizes endogenous levels of ASCT1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide of human ASCT1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 55 kD; Observed: 55 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	ASCT1; SATT; Neutral amino acid transporter A; Alanine/serine/cysteine/threonine transporter 1; ASCT-1; SATT; Solute carrier family 1 member 4
Gene Symbol	SLC1A4
Entrez Gene	6509(Human); 55963(Mouse)
SwissProt	P43007(Human); O35874(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

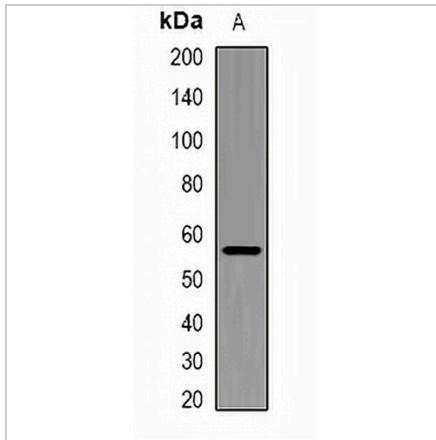
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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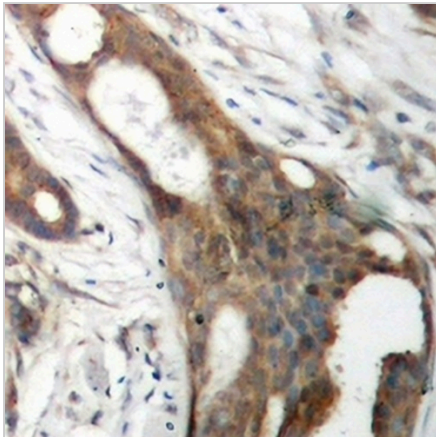
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DATA



Western blot analysis of ASCT1 expression in HepG2 (A) whole cell lysates. (Predicted band size: 55 kD; Observed band size: 55 kD)



Immunohistochemical analysis of ASCT1 staining in human ovarian cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.