

ASCT1 (P-12): sc-50807

BACKGROUND

Neutral amino acid transporter proteins, also designated alanine/serine/cysteine/threonine transporters (ASCT), belong to the sodium:dicarboxylate (SDF) symporter family or proteins. The members of this family of proteins are multi-pass membrane-bound proteins that act as transporters for threonine, alanine, serine and cysteine. ASCT1 and ASCT2 have been shown to exhibit sodium dependence. ASCT1 is expressed in most tissues, but highest expression has been detected in muscle, brain and pancreas. The highest levels of ASCT2 expression are found in placenta, kidney, pancreas, muscle and intestine.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC1A4 (human) mapping to 2p14; Slc1a4 (mouse) mapping to 11 A3.

SOURCE

ASCT1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of ASCT1 of mouse origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50807 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ASCT1 (P-12) is recommended for detection of ASCT1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

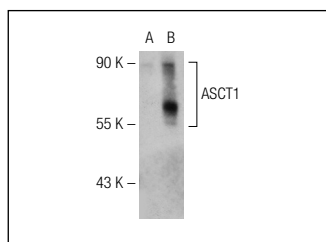
ASCT1 (P-12) is also recommended for detection of ASCT1 in additional species, including canine and porcine.

Suitable for use as control antibody for ASCT1 siRNA (h): sc-60208, ASCT1 siRNA (h): sc-60208, ASCT1 shRNA Plasmid (h): sc-60208-SH, ASCT1 shRNA Plasmid (h): sc-60208-SH, ASCT1 shRNA (h) Lentiviral Particles: sc-60208-V and ASCT1 shRNA (h) Lentiviral Particles: sc-60208-V.

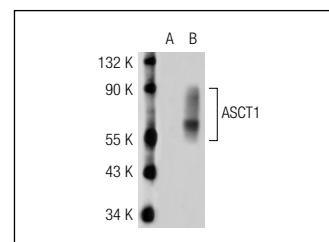
Molecular Weight of ASCT1: 56 kDa.

Positive Controls: ASCT1 (h): 293T Lysate: sc-111588.

DATA



ASCT1 (P-12): sc-50807. Western blot analysis of ASCT1 expression in non-transfected: sc-117752 (A) and human ASCT1 transfected: sc-111588 (B) 293T whole cell lysates.



ASCT1 (P-12): sc-50807. Western blot analysis of ASCT1 expression in non-transfected: sc-117752 (A) and human ASCT1 transfected: sc-113741 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.