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Datasheet for ABIN2482510

## anti-SLC38A1 antibody (AA 1-63) (Atto 488)

### 3 Images

#### Overview

Quantity:	100 µg
Target:	SLC38A1
Binding Specificity:	AA 1-63
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SLC38A1 antibody is conjugated to Atto 488
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

#### Product Details

Immunogen:	Fusion protein amino acids 1- 63 of rat SNAT1
Clone:	S104-32
Isotype:	IgG1
Specificity:	Detects ~50 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

#### Target Details

Target:	SLC38A1
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## Target Details

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Alternative Name: SLC38A1 ([SLC38A1 Products](#))

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Background: The sodium-coupled neutral amino acid transporters (SNAT) of the SLC38 gene family include System A subtypes SNAT1, SNAT2 and SNAT4 and System N subtypes SNAT3 and SNAT5. The SLC38 transporters are essential for the uptake of nutrients, energy production, metabolism, detoxification, and the cycling of neurotransmitters. The SNAT1 protein, also designated ATA1 or NAT2 is encoded by the human gene SLC38A1 which maps to chromosome 12q13.11. SNAT1 is responsible for the transport of glutamine, an intermediate in the synthesis of urea, and may be involved in the generation of glutamate in the retina. SNAT1 protein may be detected in some tissues such as heart, brain and placenta and expression levels are enriched in certain neuronal populations within the CNS. SNAT1 is not present in astrocytes.

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Gene ID: 170567

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NCBI Accession: [NP\\_620187](#)

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UniProt: [Q9JM15](#)

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## Application Details

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Application Notes: 

- WB (1:1000)
- optimal dilutions for assays should be determined by the user.

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Comment: 1 µg/ml of ABIN2482510 was sufficient for detection of SNAT1 in 20 µg of lysates from neocortical neurons cultured under amino acid starvation conditions and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

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Restrictions: For Research Use only

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## Handling

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Format: Liquid

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Concentration: 1 mg/mL

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Buffer: PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

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Preservative: Sodium azide

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Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

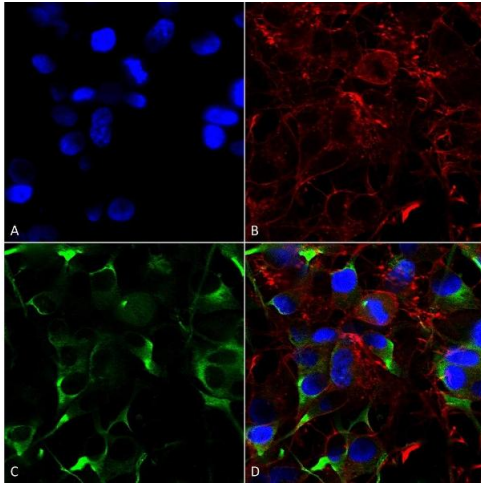
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Storage: 4 °C

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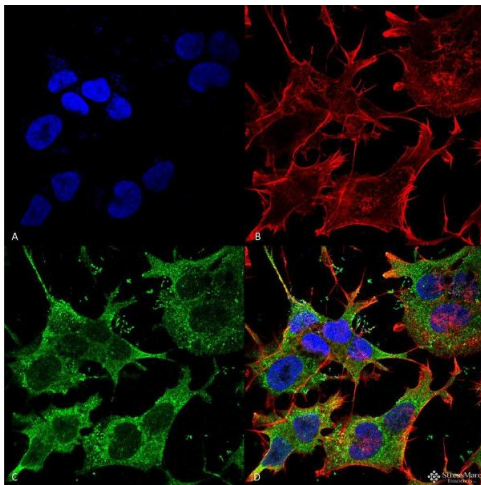
Storage Comment: Conjugated antibodies should be stored at 4°C

## Images



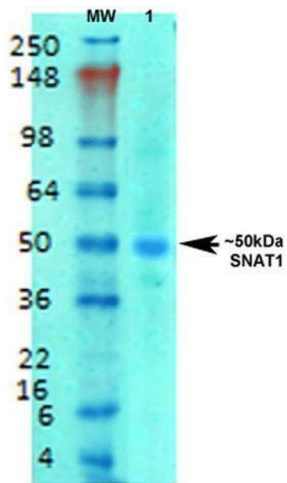
### Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SNAT1 Monoclonal Antibody, Clone S104-32 (ABIN2482510). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-SNAT1 Monoclonal Antibody (ABIN2482510) at 1:200 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) SNAT1 Antibody (D) Composite.



### Immunofluorescence (fixed cells)

**Image 2.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SNAT1 Monoclonal Antibody, Clone S104-32 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SNAT1 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) SNAT1 Antibody (D) Composite.



### Western Blotting

**Image 3.** Western Blot analysis of Rat brain membrane lysate showing detection of SLC38A1 protein using Mouse Anti-SLC38A1 Monoclonal Antibody, Clone S104-32 . Primary Antibody: Mouse Anti-SLC38A1 Monoclonal Antibody at 1:1000.