Datasheet for ABIN7581977

anti-SLC38A9 antibody (Intracellular)

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Overview

Quantity:	50 µL
Target:	SLC38A9
Binding Specificity:	AA 101-115, Intracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC38A9 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	A Rabbit Polyclonal antibody to SLC38A9
Immunogen:	(C)GSAYKLKSYTEGYGK, corresponding to amino acid residues 101 - 115 of mouse SLC38A9
Sequence:	(C)GSAYKLKSYT EGYGK
Isotype:	IgG
Specificity:	Intracellular, N-term.
Predicted Reactivity:	Rat,Human - 14 out of 15 amino acid residues identical
Characteristics:	Anti-SLC38A9 Antibody (ABIN7581977) is a highly specific antibody directed against an epitope of the mouse protein. The antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize SLC38A9 from rat, mouse and human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SLC38A9
Alternative Name:	SLC38A9 (SLC38A9 Products)
Background:	Sodium-Coupled Neutral Amino Acid Transporter 9, Solute Carrier Family 38 Member 9, Up-Regulated In Lung Cancer 11, URLC11,Sodium-coupled neutral amino acid transporter 9 (SLC38A9) is a lysosomal amino acid transporter, involved in the regulation of mechanistic target of rapamycin complex 1 (mTORC1) activity in response to amino acid levels within the lysosomal lumen1,2. A sodium-couple amino acid transporter at the lysosome, SLC38A9, senses arginine from within the lysosome to convey arginine sufficiency to mTORC1.SLC38A9 forms a complex with other lysosomal resident proteins including the v-ATPase and a pentameric complex called Ragulator3-5. v-ATPase function is necessary for mTORC1 activation, but the molecular mechanism of this regulation is currently unclear2. Ragulator binds strongly to the Rag GTPases and was shown to function as a guanine exchange factor (GEF) for RagA/B6,7. Potentially SLC38A9 and the v-ATPase are able to regulate mTORC1 activity by modulating Ragulator's GEF activity. RagA/B is not the only Rag GTPase that is regulated, but a Folliculin-FNIP2 complex is a GAP for RagC/D8,9.In short, SLC38A9 is a functional component of the lysosomal amino acid sensing machinery involved in the control of mTORC1 activity, that underlies the regulation of the metabolic status and cellular responses to growth factors, energy, glucose and amino acid levels 4.
Gene ID:	268706
UniProt:	Q8BGD6

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:200 Application Dilutions Western blot wb: 1:200
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).