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Datasheet for ABIN1394297

anti-SLC5A3 antibody (AA 251-350) (Alexa Fluor 555)

Overview

Quantity:	100 µL
Target:	SLC5A3
Binding Specificity:	AA 251-350
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC5A3 antibody is conjugated to Alexa Fluor 555
Application:	Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human SLC5A3/SMIT
Isotype:	IgG
Cross-Reactivity:	Human
Predicted Reactivity:	Mouse,Rat,Dog,Cow,Sheep,Pig,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	SLC5A3
Alternative Name:	SLC5A3/SMIT (SLC5A3 Products)

Target Details

Background: Synonyms: Na⁺/myo inositol cotransporter, Na⁺/myo-inositol cotransporter, SC5A3_HUMAN, SLC5A3, SMIT, SMIT2, sodium/myo inositol cotransporter 1, Sodium/myo inositol cotransporter, Sodium/myo-inositol cotransporter, solute carrier family 5 inositol transporters, member 3, Solute carrier family 5 member 3.

Background: Myo-inositol is involved in many important aspects of cellular regulation including membrane structure, signal transduction and osmoregulation. It is taken up into cells by the sodium/myo-inositol cotransporter (SMIT). SMIT activity maintains intracellular concentrations of myo-inositol, it is upregulated in response to hypertonic stress. The human SMIT protein is encoded by the SLC5A3 gene, which maps to chromosome 21q22.12. It is expressed in many human tissues, such as brain, kidney and placenta. Specifically, SMIT is abundantly expressed throughout the whole brain and spinal cord in fetal rat, but is downregulated in adult rat brain with the exception of the choroid plexus, where SMIT expression remains high. In kidney, SMIT localizes to the baso-lateral membranes of the thick ascending limb of Henle (TAL) and the inner medullary collecting duct (IMCD). Impaired SMIT activity is implicated in the pathogenesis of diabetes and Down syndrome.

Pathways: [Inositol Metabolic Process](#)

Application Details

Application Notes: IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

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

Storage: -20 °C

Handling

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months