

SLC9A9 Recombinant Mouse mAb

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Catalog # AP94523

Product Information

Application	WB, IHC-P, IHC-F, IF
Reactivity	Human
Predicted	Mouse, Rat
Host	Mouse
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG2a, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Late endosome membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the monovalent cation:proton antiporter 1 (CPA1) transporter (TC 2.A.36) family.
DISEASE	Note=A chromosomal aberration involving SLC9A9 has been found in a family with early-onset behavioral/developmental disorder with features of attention deficit-hyperactivity disorder and intellectual disability. Inversion inv(3)(p14;q21). The inversion disrupts DOCK3 and SLC9A9. Defects in SLC9A9 are a cause of susceptibility to autism type 16 (AUTS16) [MIM:613410]. Autism is a complex multifactorial, pervasive developmental disorder characterized by impairments in reciprocal social interaction and communication, restricted and stereotyped patterns of interests and activities, and the presence of developmental abnormalities by 3 years of age. Most individuals with autism also manifest moderate mental retardation. AUTS16 can be associated with epilepsy.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Slc9a9 (Sodium/hydrogen exchanger 9) or NHE9 may act in electroneutral exchange of protons for Na(+) across membranes. Four isoforms of the Na+/H+ exchanger (NHE6-NHE9) are distributed to intracellular compartments in human cells. They are localized to Golgi and post-Golgi endocytic compartments as follows: mid- to trans-Golgi, NHE8; trans-Golgi network, NHE7; early recycling endosomes, NHE6; and late recycling endosomes, NHE9. The intracellular localization of the NHEs is established by the balance of transport in and out of the post-Golgi compartments as the dynamic membrane trafficking. Their in vivo function is to regulate the pH and monovalent cation concentration in these organelles.

Additional Information

Target/Specificity	Ubiquitously expressed in all tissues tested. Expressed at highest levels in heart and skeletal muscle, followed by placenta, kidney, and liver. Expressed in the brain, in the medulla and spinal cord.
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Dilution	WB=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.