

SLC9A1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant SLC9A1.

Catalog # AT3932a

Product Information

Application	WB, IHC, E
Primary Accession	P19634
Other Accession	BC012121
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2F5
Calculated MW	90763

Additional Information

Gene ID	6548
Other Names	Sodium/hydrogen exchanger 1, APNH, Na(+)/H(+) antiporter, amiloride-sensitive, Na(+)/H(+) exchanger 1, NHE-1, Solute carrier family 9 member 1, SLC9A1, APNH1, NHE1
Target/Specificity	SLC9A1 (AAH12121, 31 a.a. ~ 130 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	SLC9A1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

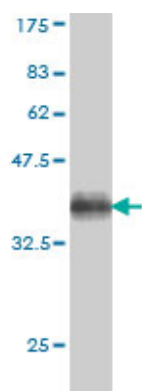
The Na⁺/H⁺ antiporter (SLC9A1) is a ubiquitous membrane-bound enzyme involved in pH regulation of vertebrate cells. It is specifically inhibited by the diuretic drug amiloride and activated by a variety of signals including growth factors, mitogens, neurotransmitters, tumor promoters, and others (Mattei et al., 1988 [PubMed 2846238]).

References

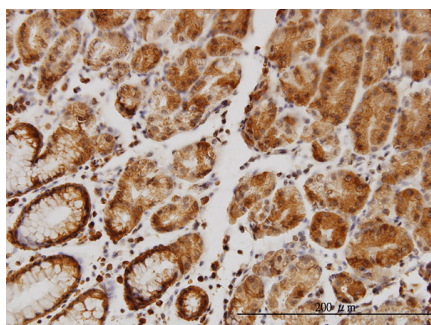
Upregulation of Na⁺/H⁺ exchanger by the AMP-activated protein kinase. Rotte A, et al. Biochem Biophys Res

Commun, 2010 Aug 6. PMID 20609358. NBCn1 and NHE1 expression and activity in DeltaNErbB2 receptor-expressing MCF-7 breast cancer cells: contributions to pH_i regulation and chemotherapy resistance. Lauritzen G, et al. Exp Cell Res, 2010 Sep 10. PMID 20542029. Ouabain stimulates Na-K-ATPase through a sodium/hydrogen exchanger-1 (NHE-1)-dependent mechanism in human kidney proximal tubule cells. Hothouser KA, et al. Am J Physiol Renal Physiol, 2010 Jul. PMID 20427472. Inhibition of Na⁽⁺⁾/H⁽⁺⁾ exchanger 1 by 5-(N-ethyl-N-isopropyl) amiloride reduces hypoxia-induced hepatocellular carcinoma invasion and motility. Yang X, et al. Cancer Lett, 2010 Sep 28. PMID 20338684. Activation of Na⁺/H⁺ exchanger 1 by neurotensin signaling in pancreatic cancer cell lines. Olszewski U, et al. Biochem Biophys Res Commun, 2010 Mar 12. PMID 20138826.

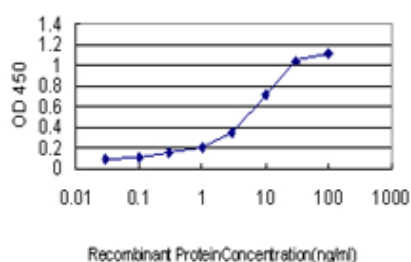
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.41 KDa) .



Immunoperoxidase of monoclonal antibody to SLC9A1 on formalin-fixed paraffin-embedded human stomach. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged SLC9A1 is approximately 0.3ng/ml as a capture antibody.

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