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Sodium hydrogen exchanger 1 Rabbit pAb

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Catalog # AP54201

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P19634
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Rabbit, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	90763
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NHE1
Epitope Specificity	470-550/815
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a Na+/H+ antiporter that is a member of the solute carrier family 9. The encoded protein is a plasma membrane transporter that is expressed in the kidney and intestine. This protein plays a central role in regulating pH homeostasis, cell migration and cell volume. This protein may also be involved in tumor growth. [provided by RefSeq, Sep 2011]

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 (HGNC:11071)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=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.

Protein Information

Name	SLC9A1 (HGNC:11071)

Function	Electroneutral Na(+) /H(+) antiporter that extrudes Na(+) in exchange for external protons driven by the inward sodium ion chemical gradient, protecting cells from acidification that occurs from metabolism (PubMed:11350981, PubMed:11532004, PubMed:14680478, PubMed:15035633, PubMed:15677483, PubMed:17073455, PubMed:17493937, PubMed:22020933, PubMed:27650500, PubMed:32130622, PubMed:7110335, PubMed:7603840). Exchanges intracellular H(+) ions for extracellular Na(+) in 1:1 stoichiometry (By similarity). Plays a key role in maintening intracellular pH neutral and cell volume, and thus is important for cell growth, proliferation, migration and survival (PubMed:12947095, PubMed:15096511, PubMed:22020933, PubMed:8901634). In addition, can transport lithium Li(+) and also functions as a Na(+)/Li(+) antiporter (PubMed:7603840). SLC9A1 also functions in membrane anchoring and organization of scaffolding complexes that coordinate signaling inputs (PubMed:15096511).
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P48762}; Multi-pass membrane protein. Note=Localized basolaterally in every epithelial cell, except in the choroid plexus where SLC9A1 is expressed luminally.
Tissue Location	Kidney and intestine.

Background

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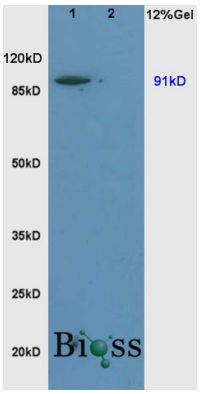
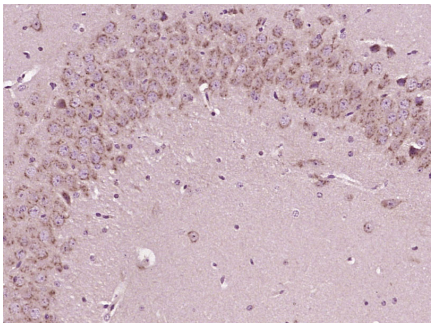
Images



Sample:
Brain(Rat) lysate at 30ug;
Liver(Rat) lysate at 30ug;
Primary: Anti-NHE1 (AP54201) at 1:200 dilution;
Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G) at 1: 3000 dilution;
Predicted band size : 91kD
Observed band size : 91kD

We are unsure as to the identity of these extra bands



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Sodium hydrogen exchanger 1) Polyclonal Antibody, Unconjugated (AP54201) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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