Nhe-1 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Nhe-1 (CT)

PromoKine

Instruction Manual

Catalog Number	PK-AB718-4377
Synonyms	Nhe-1 Antibody: Sodium-hydrogen exchanger 1, solute carrier family 9 member 1, SLC9A1, Na+, H+ antiporter
Description	The Na+/H+ antiporter (Nhe-1) is a ubiquitous membrane-bound enzyme involved in pH regulation of vertebrate cells and is specifically inhibited by the diuretic drug amiloride and activated by a variety of signals including growth factors, mitogens, neurotransmitters, and tumor promoters. Nhe-1 acts as an anchor for actin filaments to control the integrity of the cortical cytoskeleton. This occurs through a previously unrecognized structural link between Nhe-1 and the actin-binding proteins ezrin, radixin, and moesin, collectively referred to as ERM proteins. A structural role for Nhe-1 has been proposed in regulating the cortical cytoskeleton that is independent of its function as an ion exchanger. It is also thought that Nhe-1 play a role in hypertension. At least two isoforms of Nhe-1 are known to exist.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Nhe-1 antibody was raised in rabbits against a 20 amino acid peptide near the carboxy terminus of the human Nhe-1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined indivudually.
	Nhe-1 antibody can be used for detection of Nhe-1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Mendoza SA. The Na+-H+ antiport is a mediator of cell proliferation. Acta Paediatr. Scand. 1987; 76:545-7. Denker SP, Huang DC, Orlowski J, et al. Direct binding of the NA—H exchanger NHE1 to ERM proteins regulates the cortical cytoskeleton and cell shape independently of H(+) translocation. Mol. Cell. 2000; 6:1425-36. Cingolani HE, Rebolledo OR, Portiansky EL, et al. Regression of hypertensive myocardial fibrosis by NA (+)/H(+) exchange inhibition. Hypertension 2003; 41:373-7.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4377P; Nhe-1 Peptide Cat.No. PK-AB718-1465; Rat Kidney Tissue Lysate

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

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