Datasheet: OBT1655

BATCH NUMBER 166354

Description:	MOUSE ANTI Na+/H+ EXCHANGER-1
Specificity:	Na+/H+ EXCHANGER-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4E9
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen		▪		
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation		▪		
Western Blotting	▪			1/500

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Pig

Species Cross Reactivity

Reacts with: Rabbit, Fish, Mouse, Rat, Salamander
Based on sequence similarity, is expected to react with:Vertebrates
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide (NaN_3)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Maltose binding protein fusion protein containing the entire C-terminal, hydrophilic domain of porcine NHE1.
External Database Links	**UniProt:** P48762 Related reagents **Entrez Gene:** 397458 SLC9A1 Related reagents
Synonyms	NHE1
RRID	AB_609778
Specificity	**Mouse anti Porcine sodium/hydrogen exchanger 1 antibody, clone 4E9** recognizes the Na^+/H^+ exchanger-1 (NHE1), a membrane protein involved in pH regulation and signal transduction. Mouse anti Porcine sodium/hydrogen exchanger 1 antibody, clone 4E9 recognizes NHE1 from the salamander *Amphiuma tridactylum* (McLean *et al.* 1999) and in the flounder *Pseudopleuronectes americanus*
Western Blotting	OBT1655 detects a band of approximately 100 kDa in human kidney lysates.
References	1. Rutherford, P.A. *et al.* (1997) Expression of Na(+)-H+ exchanger isoforms NHE1 and NHE3 in kidney and blood cells of rabbit and rat. Exp Nephrol. 5 (6): 490-7. 2. McLean LA *et al.* (1999) Cloning and expression of the Na+/H+ exchanger from *Amphiuma* RBCs: resemblance to mammalian NHE1. Am J Physiol. 276 (5 Pt 1): C1025-37. 3. Biemesderfer, D. *et al.* (1999) Specific association of megalin and the Na+/H+ exchanger isoform NHE3 in the proximal tubule. J Biol Chem. 274 (25): 17518-24. 4. Claiborne, J.B. *et al.* (1999) A mechanism for branchial acid excretion in marine fish: identification of multiple Na+/H+ antiporter (NHE) isoforms in gills of two seawater teleosts. J Exp Biol. 202: 315-24. 5. Liu, F. & Gesek, F.A. (2001) alpha(1)-Adrenergic receptors activate NHE1 and NHE3 through distinct signaling pathways in epithelial cells. Am J Physiol Renal Physiol. 280 (3): F415-25. 6. Choe, K.P. *et al.* (2002) Immunological detection of Na(+)/H(+) exchangers in the gills of a hagfish, Myxine glutinosa, an elasmobranch, Raja erinacea, and a teleost, *Fundulus heteroclitus.* Comp Biochem Physiol A Mol Integr Physiol. 131: 375-85.

7. Goyal, S. *et al.* (2003) Renal expression of novel Na+/H+ exchanger isoform NHE8. Am J Physiol Renal Physiol. 284 (3): F467-73.
8. Pedersen, S.F. *et al.* (2003) Molecular cloning of NHE1 from winter flounder RBCs: activation by osmotic shrinkage, cAMP, and calyculin A. Am J Physiol Cell Physiol. 284 (6): C1561-76.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/OBT1655 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com
Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M381654:210512'

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