




Product datasheet

Anti-SLC4A4/NBC antibody ab217352

1 Image

Overview

Product name	Anti-SLC4A4/NBC antibody
Description	Rabbit polyclonal to SLC4A4/NBC
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	<p>Reacts with: Mouse</p> <p>Predicted to work with: Rat, Human </p>
Immunogen	<p>Synthetic peptide within Mouse SLC4A4/NBC aa 1-40 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. from Isoform 2 (known as kNBC) Sequence:</p> <p>MSTENVEGKP NNLGERGRAR SSTFLRVFQP MFNHSIFTSA</p> <p>Database link: O88343-2</p> <p style="text-align: right;"> Run BLAST with  Run BLAST with</p>
Positive control	Mouse brain tissue.
General notes	<p>Protein previously labeled as SLC4A4.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions,</p>

special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 1% BSA, 50% Glycerol
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab217352** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/500.

Target

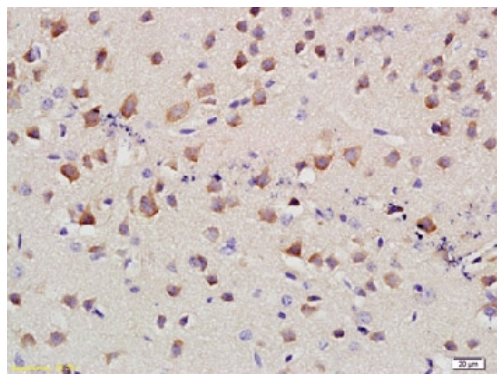
Function	Electrogenic sodium/bicarbonate cotransporter with a Na(+):HCO ₃ (-) stoichiometry varying from 1:2 to 1:3. May regulate bicarbonate influx/efflux at the basolateral membrane of cells and regulate intracellular pH.
Tissue specificity	Isoform 1 is expressed in pancreas and to a lower extent in heart, skeletal muscle, liver, parotid salivary glands, prostate, colon, stomach, thyroid, brain and spinal chord. Corneal endothelium cells express only isoform 1 (at protein level). Isoform 2 is specifically expressed in kidney at the level of proximal tubules.
Involvement in disease	Defects in SLC4A4 are the cause of proximal renal tubular acidosis with ocular abnormalities (pRTA-OA) [MIM:604278]; also known as renal tubular acidosis II. Caused by an impairment of bicarbonate absorption in the proximal tubule, proximal renal tubular acidosis (pRTA) is characterized by a decreased renal HCO ₃ (-) threshold. pRTA-OA is an extremely rare autosomal recessive syndrome characterized by short stature, profound pRTA, mental retardation, bilateral glaucoma, cataracts and bandkeratopathy. Note=Loss of interaction with and stimulation by CA4 is the cause of retinitis pigmentosa type 17 (RP17).
Sequence similarities	Belongs to the anion exchanger (TC 2.A.31) family.
Post-translational modifications	Phosphorylation of Ser-1026 by PKA increases the binding of CA2 and changes the Na(+):HCO ₃ (-) stoichiometry of the transporter from 3:1 to 2:1. Phosphorylation of Thr-49 regulates isoform 1 conductance.

N-glycosylation is not necessary for the transporter basic functions.

Cellular localization

Basolateral cell membrane.

Images



Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse brain tissue labeling SLC4A4/NBC with ab217352 at 1/400 dilution followed by conjugation to the secondary antibody and DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC4A4/NBC antibody (ab217352)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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