



# S4A7 Monoclonal Antibody

Catalog No	YP-mAb-06198
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SLC4A7 BT NBC2 NBC2B NBC3 SBC2 SLC4A6
Protein Name	Sodium bicarbonate cotransporter 3 (Sodium bicarbonate cotransporter 2) (Sodium bicarbonate cotransporter 2b) (Bicarbonate transporter) (Solute carrier family 4 member 7)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	S4A7 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	133kD
Cell Pathway	Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane ; Multi-pass membrane protein . Cell projection, stereocilium . Also described at the apical cell membrane. Localizes to the stereocilia of cochlear outer hair cells and to the lateral membrane of cochlear inner hair cells (By similarity). .
Tissue Specificity	Highly expressed in testis and spleen. Also expressed in retina, colon, small intestine, ovary, thymus, prostate, muscle, heart and kidney. Isoform 1 is expressed in skeletal muscle and heart muscle.
Function	domain:The PDZ-binding motif mediates interaction with the CFTR, SLC9A3R1/EBP50 complex and probably with USH1C.,enzyme regulation:Transporter activity is regulated by CA2/carbonic anhydrase 2, cAMP and PKA. Insensitive to stilbene derivatives. PubMed:10347222 states it is inhibited by 5-(N-ethyl-N-isopropyl)-amiloride (EIPA).,function:Electroneutral sodium- and bicarbonate-dependent cotransporter with a Na(+):HCO3(-) 1:1 stoichiometry. Regulates intracellular pH and may play a role in bicarbonate salvage in secretory epithelia. May also have an associated sodium channel activity.,PTM:N-glycosylated.,similarity:Belongs to the anion exchanger (TC 2.A.31) family.,subcellular location:Also described at the apical cell membrane. Localizes to the stereocilia of cochlear outer hair cells and to the lateral



membrane of cochlear inner hair cells.,subunit:Interacts with CFTR through SLC9A3R1/EBP5

**Background**

This locus encodes a sodium bicarbonate cotransporter. The encoded transmembrane protein appears to transport sodium and bicarbonate ions in a 1:1 ratio, and is thus considered an electroneutral cotransporter. The encoded protein likely plays a critical role in regulation of intracellular pH involved in visual and auditory sensory transmission. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Apr 2012],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images