

SLC26A5 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant SLC26A5.

Catalog # AT3916a

Product Information

Application	WB, E
Primary Accession	P58743
Other Accession	NM_198999
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1F4
Calculated MW	81264

Additional Information

Gene ID	375611
Other Names	Prestin, Solute carrier family 26 member 5, SLC26A5, PRES
Target/Specificity	SLC26A5 (NP_945350, 645 a.a. ~ 742 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	SLC26A5 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

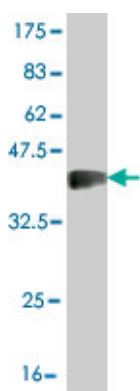
Background

This gene encodes a member of the SLC26A/SuLP transporter family. The protein functions as a molecular motor in motile outer hair cells (OHCs) of the cochlea, inducing changes in cell length that act to amplify sound levels. The transmembrane protein is an incomplete anion transporter, and does not allow anions to cross the cell membrane but instead undergoes a conformational change in response to changes in intracellular Cl⁻ levels that results in a change in cell length. The protein functions at microsecond rates, which is several orders of magnitude faster than conventional molecular motor proteins. Mutations in this gene are potential candidates for causing neurosensory deafness. Multiple transcript variants encoding different isoforms have been found for this gene.

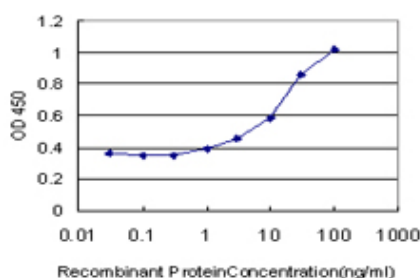
References

Genotyping with a 198 mutation arrayed primer extension array for hereditary hearing loss: assessment of its diagnostic value for medical practice. Rodriguez-Paris J, et al. PLoS One, 2010 Jul 26. PMID 20668687. Structure of the cytosolic portion of the motor protein prestin and functional role of the STAS domain in SLC26/SulP anion transporters. Pasqualetto E, et al. J Mol Biol, 2010 Jul 16. PMID 20471983. Cysteine mutagenesis reveals transmembrane residues associated with charge translocation in prestin. McGuire RM, et al. J Biol Chem, 2010 Jan 29. PMID 19926791. Mutation-induced reinforcement of prestin-expressing cells. Kumano S, et al. Biochem Biophys Res Commun, 2009 Nov 27. PMID 19737539. Structural rearrangements of the motor protein prestin revealed by fluorescence resonance energy transfer. Gleitsman KR, et al. Am J Physiol Cell Physiol, 2009 Aug. PMID 19515900.

Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.78 KDa) .



Detection limit for recombinant GST tagged SLC26A5 is approximately 1 ng/ml as a capture antibody.

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