

SLC26A5 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant SLC26A5. Catalog # AT3916a

Specification

SLC26A5 Antibody (monoclonal) (M04) - Product Information

Application WB, E **Primary Accession** P58743 Other Accession NM 198999 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2a Kappa Calculated MW 81264

SLC26A5 Antibody (monoclonal) (M04) - 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

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.

SLC26A5 Antibody (monoclonal) (M04) - Protocols

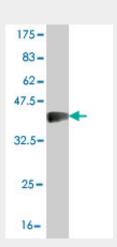
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

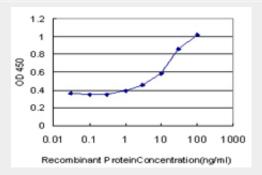


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC26A5 Antibody (monoclonal) (M04) - Images



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



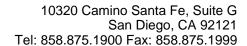
Detection limit for recombinant GST tagged SLC26A5 is approximately 1ng/ml as a capture antibody.

SLC26A5 Antibody (monoclonal) (M04) - 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 CI- 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.

SLC26A5 Antibody (monoclonal) (M04) - 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.