

Prestin (SLC26A5) Recombinant Protein | SLC26A5 recombinant protein

Recombinant Human Prestin (SLC26A5), partial

CATALOG # AAA113559	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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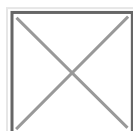
PRODUCT SYNONYMS

Prestin (SLC26A5); Recombinant Human Prestin (SLC26A5); partial; Solute carrier family 26 member 5; SLC26A5 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	501-744. Partial
Sequence	YRTQSPSYKV LGKLPETDVY IDIDAYEEVK EIPGIKIFQI NAPIYYANS D LYSNALKRKT GVNPAVIMGA RRKAMRKYAK EVGNANMANA TVVKADAEVD GEDATKPEEE DGEVKYPPIV IKSTFPEEMQ RFMPPGDNVH TVILDFTQVN FIDSVGVKTL AGIVKEYGDV GIYVYLAGCS AQVVDLTRN RFFENPALWE LLFHSIHDAV LGSQRLREALA EQEASAPPSQ EDLEPNATPA TPEA
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for SLC26A5 recombinant protein	Motor protein that converts auditory stimuli to length changes in outer hair cells and mediates sound amplification in the mammalian hearing organ. Prestin is a bidirectional voltage-to-force converter, it can operate at microsecond rates. It uses cytoplasmic anions as extrinsic voltage sensors, probably chloride and bicarbonate. After binding to a site with millimolar affinity, these anions are translocated across the membrane in response to changes in the transmembrane voltage. They move towards the extracellular surface following hyperpolarization, and towards the cytoplasmic side in response to depolarization. As a consequence, this translocation triggers conformational changes in the protein that ultimately alter its surface area in the plane of the plasma membrane. The area decreases when the anion is near the cytoplasmic face of the membrane (short state), and increases when the ion has crossed the membrane to the outer surface (long state). So, it acts as an incomplete transporter. It swings anions across the membrane, but does not allow these anions to dissociate and escape to the extracellular space. Salicylate, an inhibitor of outer hair cell motility, acts as competitive antagonist at the prestin anion-binding site.
Product Categories/Family for SLC26A5 recombinant protein	Neuroscience

References

Prestin, a cochlear motor protein, is defective in non-syndromic hearing loss.Liu X.Z., Ouyang X.M., Xia X.J., Zheng J., Pandya A., Li F., Du L.L., Welch K.O., Petit C., Smith R.J.H., Webb B.T., Yan D., Arnos K.S., Corey D., Dallos P., Nance W.E., Chen Z.-Y.Hum. Mol. Genet. 12:1155-1162(2003) Sequence of an alternatively spliced isoform of prestin (SLC26A5e) .Mount D.B.The DNA sequence of human chromosome 7.Hillier L.W., Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H., Wagner-McPherson C., Layman D., Maas J., Jaeger S., Walker R., Wylie K., Sekhon M., Becker M.C., O’Laughlin M.D., Schaller M.E., Fewell G.A., Delehaunty K.D., Miner T.L., Nash W.E., Cordes M., Du H., Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A., Vanbrunt A., Nguyen C., Du F., Lamar B., Courtney L., Kalicki J., Ozersky P., Bielicki L., Scott K., Holmes A., Harkins R., Harris A., Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S., Kozlowicz-Reilly A., Leonard S., Rohlfing T., Rock S.M., Tin-Wollam A.-M., Abbott A., Minx P., Maupin R., Strowmatt C., Latreille P., Miller N., Johnson D., Murray J., Woessner J.P., Wendl M.C., Yang S.-P., Schultz B.R., Wallis J.W., Spieth J., Bieri T.A., Nelson J.O., Berkowicz N., Wohldmann P.E., Cook L.L., Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Mardis E.R., Clifton S.W., Chissoe S.L., Marra M.A., Raymond C., Haugen E., Gillett W., Zhou Y., James R., Phelps K., Iadanoto S., Bubb K., Simms E., Levy R., Clendenning J., Kaul R., Kent W.J., Furey T.S., Baertsch R.A., Brent M.R., Keibler E., Flicek P., Bork P., Suyama M., Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R., Eddy S.R., McPherson J.D., Olson M.V., Eichler E.E., Green E.D., Waterston R.H., Wilson R.K.Nature 424:157-164(2003)

NCBI AND UNIPROT INFORMATION

NCBI GI #	269784651
NCBI GeneID	375611
NCBI Accession #	NP_001161434.1
NCBI GenBank Nucleotide #	NM_001167962.1
UniProt Accession #	P58743; Q496J2; Q7Z7F3; Q86UF8; Q86UF9; Q86UG0
Molecular Weight	29 kDa
NCBI Official Full Name	prestin isoform e
NCBI Official Synonym Full Names	solute carrier family 26 (anion exchanger), member 5
NCBI Official Symbol	SLC26A5
NCBI Official Synonym Symbols	PRES; DFNB61
NCBI Protein Information	prestin
UniProt Protein Name	Prestin
UniProt Gene Name	SLC26A5
UniProt Synonym Gene Names	PRES
UniProt Entry Name	S26A5_HUMAN

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