Potassium Voltage-Gated Channel Protein Shal (SHAL) Drosophila Melanogaster Recombinant Protein

PRODUCT OVERVIEW

Product Name	Potassium voltage-gated channel protein Shal (Shal), Recombinant Protein
Full Product Name	Recombinant Drosophila melanogaster Potassium voltage-gated channel protein Shal (Shal)
Product Gene Name	Shal recombinant protein
Product Synonym Gene Name	Shal; SHAL2; CG9262
Product Synonym Names	Recombinant Potassium voltage-gated channel protein Shal (Shal); Potassium voltage-gated channel protein Shal; Shaker cognate l Shal2
Sequence	MASVAAWLPF ARAAAIGWVP IATHPLPPPP MPKDRRKTDD EKLLINVSGR RFETWRNTLE KYPDTLLGSN EREFFYDEDC KEYFFDRDPD IFRHILNYYR TGKLHYPKHE CLTSYDEELA FFGIMPDVIG DCCYEDYRDR KRENAERLMD DKLSENGDQN LQQLTNMRQK MWRAFENPHT STSALVFYYV TGFFIAVSVM ANVVETVPCG HRPGRAGTLP CGERYKIVFF CLDTACVMIF TAEYLLRLFA APDRCKFVRS VMSIIDVVAI MPYYIGLGIT DNDDVSGAFV TLRVFRVFRI FKFSRHSQGL RILGYTLKSC ASELGFLVFS LAMAIIIFAT VMFYAEKNVN GTNFTSIPAA FWYTIVTMTT LGYGDMVPET IAGKIVGGVC SLSGVLVIAL PVPVIVSNFS RIYHQNQRAD KRKAQRKARL ARIRIAKASS GAAFVSKKKA AEARWAAQES GIELDDNYRD EDIFELQHHH LLRCLEKTTD REFVELEIPF NGQPKRPGSP SPMASPAHST NSAAGLLQSC CGRCCSQRYQ ACGKYMPAAS NAQNSQNNQP MDGTYLVEAS F
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degree C. For extended storage, store at -20 or -80 degree C.
Molecular Weight	64,570 Da
Sequence Positions	1-571
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
Chromosome Location	Chromosome: 3L; NT_037436.3 (19561538..19577680, complement). Location: 76B7-76B8
3D Structure	ModBase 3D Structure for P17971
Species	Drosophila melanogaster (Fruit fly)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for Shal recombinant protein	MBS1223221 is a recombinant protein targeting Shal. Also known as Recombinant Drosophila melanogaster Potassium voltage-gated channel protein Shal (Shal). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of Shal recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Shal. It may not necessarily be applicable to this product.

NCBI GI #	161084970
NCBI GeneID	40129
NCBI Accession #	NP_001097646.1
UniProt Primary Accession #	P17971
UniProt Secondary Accession #	Q29R37; Q9VW11; A8JNV8
UniProt Related Accession #	AAF49144
GenBank Nucleotide #	NM_001104176.1
NCBI Official Full Name	shaker cognate l, isoform B
NCBI Official Synonym Full Names	Shaker cognate l
NCBI Official Symbol	Shal
NCBI Official Synonym Symbols	CG9262; DmelCG9262; dShal; Sh-l; shal; Shl
UniProt Protein Name	Potassium voltage-gated channel protein Shal
UniProt Synonym Protein Names	Shaker cognate l; Shal2
Protein Family	Potassium voltage-gated channel protein
UniProt Gene Name	Shal
UniProt Synonym Gene Names	SHAL2
UniProt Entry Name	KCNAL_DROME
NCBI Protein Information	CG9262 gene product from transcript CG9262-RB; CG9262-PA; CG9262-PB; Shaker-like; Shal-PA; Shal-PB; shaker cognate 1; shaker cognate l
UniProt Comments for Shal	Function: Mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient. May play a role in the nervous system and in the regulation of beating frequency in pacemaker cells. Subunit structure: Heterotetramer of potassium channel proteins By similarity. Interacts (via C-terminal dendritic targeting motif) with SIDL. Ref.6 Subcellular location: Membrane; Multi-pass membrane protein. Cell projection › dendrite. Perikaryon. Tissue specificity: Co-expressed with SIDL in the nervous system. Ref.6 Domain: The N-terminus may be important in determining the rate of inactivation of the channel while the tail may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments. Miscellaneous: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position. Sequence similarities: Belongs to the potassium channel family. D (Shal) (TC 1.A.1.2) subfamily. Shal sub-subfamily. [View classification]
Research Articles on Shal	**1.** In Drosophila, the single Shal/K(v)4 gene encodes the predominant I(A) current in many neuronal cell bodies.
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