

Datasheet for ABIN7545139
VSX2 Protein (AA 1-361) (His tag)



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Overview

Quantity:	1 mg
Target:	VSX2
Protein Characteristics:	AA 1-361
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VSX2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant VSX2 Protein expressed in mammalian cells.
Sequence:	<p>MTGKAGEALS KPKSETVAKS TSGGAPARCT GFGIQEILGL NKEPPSSHPR AALDGLAPGH LLAARSVLSP AGVGGMGLLG PGGLPGFYTQ PTFLEVLSDP QSVHLQPLGR ASGPLDTSQT ASSDSEDVSS SDRKMSKSAL NQTKKRKRHR HRTIFTSYQL EEELEKAFNEA HYPDVYAREM LAMKTELPED RIQVWFQNR AKWRKREKCW GRSSVMAEYG LYGAMVRHSI PLPESILKSA KDGIMDSCAP WLLGMHKKSL EAAAESGRKP EGERQALPKL DKMEQDERGP DAQAAISQEE LRENSIAVLR AKAQEHSTKV LGTVSGPDSL ARSTEKPEEE EAMDEDPAE RLSPPQLEDMA</p> <p>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</p>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
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Grade:	custom-made
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Target Details

Target:	VSX2
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Alternative Name:	VSX2 (VSX2 Products)
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Background:	<p>Visual system homeobox 2 (Ceh-10 homeodomain-containing homolog) (Homeobox protein CHX10),FUNCTION: Acts as a transcriptional regulator through binding to DNA at the consensus sequence 5'-[TC]TAATT[AG][AG]-3' upstream of gene promoters (PubMed:27301076). Plays a significant role in the specification and morphogenesis of the sensory retina (By similarity). May play a role in specification of V2a interneurons during spinal cord development (By similarity). Mediates differentiation of V2a interneurons by repression of motor neuron gene transcription, via competitively binding to response elements that are activated by the ISL1-LHX3 complex, such as VSX1 (PubMed:17919464, PubMed:27477290). Acts as a positive transcriptional regulator of NXNL1, regulation is significantly increased in synergy with VSX1 (By similarity). Acts as a negative transcriptional regulator of MITF (By similarity). Represses SAG transcription by competitive inhibition of ISL1-LHX3 response elements (PubMed:16236706, PubMed:27477290). Binds to the photoreceptor conserved element-1 (PCE-1) in the promoter of rod photoreceptor arrestin SAG and acts as a transcriptional repressor (By similarity). Involved in the development of retinal ganglion cells</p>
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Target Details

(RGCs) which leads to release of SHH by RGCs, promoting Hedgehog signaling and subsequent proliferation of retinal progenitor cells (By similarity). Participates in the development of the cells of the inner nuclear layer, by promoting postnatal differentiation of bipolar cells with a comparable inhibition of rod cell differentiation (By similarity). May play a role in the maintenance of neural retina identity during development by regulation of canonical Wnt genes and CTNNB1 localization, suggesting a role in the regulation of canonical Wnt signaling (PubMed:27301076). {ECO:0000250|UniProtKB:Q61412, ECO:0000269|PubMed:16236706, ECO:0000269|PubMed:17919464, ECO:0000269|PubMed:27301076, ECO:0000269|PubMed:27477290}.

Molecular Weight: 39.4 kDa

UniProt: [P58304](#)

Pathways: [Dopaminergic Neurogenesis](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months