

Datasheet for ABIN7549896 NOVA2 Protein (AA 1-492) (His tag)



Overview

Quantity:	1 mg
Target:	NOVA2
Protein Characteristics:	AA 1-492
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NOVA2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant NOVA2 Protein expressed in mammalian cells.
Sequence:	MEPEAPDSRK RPLETPPEVV CTKRSNTGEE GEYFLKVLIP SYAAGSIIGK GGQTIVQLQK
	ETGATIKLSK SKDFYPGTTE RVCLVQGTAE ALNAVHSFIA EKVREIPQAM TKPEVVNILQ
	PQTTMNPDRA KQAKLIVPNS TAGLIIGKGG ATVKAVMEQS GAWVQLSQKP EGINLQERVV
	TVSGEPEQVH KAVSAIVQKV QEDPQSSSCL NISYANVAGP VANSNPTGSP YASPADVLPA
	AAAASAAAAS GLLGPAGLAG VGAFPAALPA FSGTDLLAIS TALNTLASYG YNTNSLGLGL
	NSAAASGVLA AVAAGANPAA AAAANLLASY AGEAGAGPAG GAAPPPPPPP GALGSFALAA
	AANGYLGAGA GGGAGGGGGP LVAAAAAAGA AGGFLTAEKL AAESAKELVE IAVPENLVGA
	ILGKGGKTLV EYQELTGARI QISKKGEFLP GTRNRRVTIT GSPAATQAAQ YLISQRVTYE
	QGVRASNPQK VG 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.
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: 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. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: custom-made Grade: **Target Details** NOVA2 Target: Alternative Name: NOVA2 (NOVA2 Products) Background: RNA-binding protein Nova-2 (Astrocytic NOVA1-like RNA-binding protein) (Neuro-oncological ventral antigen 2), FUNCTION: Functions to regulate alternative splicing in neurons by binding pre-mRNA in a sequence-specific manner to activate exon inclusion or exclusion (PubMed:32197073). It binds specifically to the sequences 5'-YCAY-3' and regulates splicing in only a subset of regulated exons (PubMed:10811881). Binding to an exonic 5'-YCAY-3' cluster changes the protein complexes assembled on pre-mRNA, blocking U1 snRNP binding and exon inclusion, whereas binding to an intronic 5'-YCAY-3' cluster enhances spliceosome assembly and exon inclusion. With NOVA1, they perform unique biological functions in different brain

areas and cell types. Uniquely regulates alternative splicing events of a series of axon guidance

development by regulating neural networks wiring. Regulates differentially alternative splicing

on the same transcripts expressed in different neurons. This includes functional differences in

related genes during cortical development, being essential for central nervous system

Target Details

transcripts expressed in cortical and cerebellar excitatory versus inhibitory neurons where is required for, respectively, development of laminar structure and motor coordination and synapse formation. Also the regulation the regulation of intron retention can sequester the trans-acting splicing factor PTBP2, acting as a variable cis-acting scaffolding platform for PTBP2 across various natural conditions (By similarity). {ECO:0000250|UniProtKB:A0A1W2P872, ECO:0000269|PubMed:10811881, ECO:0000269|PubMed:32197073}.

Molecular Weight:

49.0 kDa

UniProt:

Q9UNW9

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:

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