

# Datasheet for ABIN7561642 NOVA1 Protein (AA 1-507) (His tag)



## Overview

Quantity:	1 mg
Target:	NOVA1
Protein Characteristics:	AA 1-507
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NOVA1 protein is labelled with His tag.

### **Product Details**

Product Details	
Purpose:	Custom-made recombinant Nova1 Protein expressed in mammalian cells.
Sequence:	MMAAAPIQQN GTHTGVPIDL DPPDSRKRPL EAPPEAGSTK RTNTGEDGQY FLKVLIPSYA
	AGSIIGKGGQ TIVQLQKETG ATIKLSKSKD FYPGTTERVC LIQGTIEALN AVHGFIAEKI
	REMPQNVAKT EPVSILQPQT TVNPDRIKQT LPSSPTTTKS SPSDPMTTSR ANQVKIIVPN
	STAGLIIGKG GATVKAIMEQ SGAWVQLSQK PDGINLQERV VTVSGEPEQN RKAVELIIQK
	IQEDPQSGSC LNISYANVTG PVANSNPTGS PYANTAEVLP TAAAAAGLLG HANLAGVAAF
	PAVLSGFTGN DLVAITSALN TLASYGYNLN TLGLGLSQAA ATGALAAAAA SANPAAAAAN
	LLATYASEAS ASGSTAGGTA GTFALGSLAA ATAATNGYFG AASPLAASAI LGTEKSTDGS
	KDVVEIAVPE NLVGAILGKG GKTLVEYQEL TGARIQISKK GEFVPGTRNR KVTITGTPAA
	TQAAQYLITQ RITYEQGVRA ANPQKVG 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** NOVA1 Target: Alternative Name: Nova1 (NOVA1 Products) Background: RNA-binding protein Nova-1 (Neuro-oncological ventral antigen 1) (Ventral neuron-specific protein 1), FUNCTION: Functions to regulate alternative splicing in neurons by binding premRNA in a sequence-specific manner to activate exon inclusion or exclusion (PubMed:8558240, PubMed:15933722, PubMed:17065982, PubMed:14615540). It binds specifically to the sequences 5'-YCAY-3' and regulates splicing in only a subset of regulated exons (PubMed:9154818, PubMed:8558240, PubMed:14615540). 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 (PubMed:10719891). Binding to 5'-YCAY-3' clusters results in a

neurons. Binding to an exonic 5'-YCAY-3' cluster changed the protein complexes assembled on

pre-mRNA, blocking U1 snRNP (small nuclear ribonucleoprotein) binding and exon inclusion,

local and asymmetric action to regulate spliceosome assembly and alternative splicing in

whereas binding to an intronic 5'-YCAY-3' cluster enhanced spliceosome assembly and exon inclusion (PubMed:17065982, PubMed:15933722). With NOVA1, they perform unique biological functions in different brain areas and cell types (PubMed:30638744). Autoregulates its own expression by acting as a splicing repressor (PubMed:15933722). Acts to activate the inclusion of exon E3A in the glycine receptor alpha-2 chain and of exon E9 in gamma-aminobutyric-acid receptor gamma-2 subunit via a distal downstream UCAU-rich intronic splicing enhancer (PubMed:12808107). Acts to regulate a novel glycine receptor alpha-2 chain splice variant (alpha-2N) in developing spinal cord (PubMed:17065982). {ECO:0000269|PubMed:10719891, ECO:0000269|PubMed:12808107, ECO:0000269|PubMed:14615540, ECO:0000269|PubMed:15933722, ECO:0000269|PubMed:17065982,

ECO:0000269|PubMed:30638744, ECO:0000269|PubMed:8558240,

ECO:0000269|PubMed:9154818}.

Molecular Weight: 51.8 kDa

UniProt: Q9JKN6

### **Application Details**

We expect the protein to work for functional studies. As the protein has not been tested for Application Notes:

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