

**NOVA1 Antibody (Internal)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS12732****Specification**

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**NOVA1 Antibody (Internal) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P51513</a>
Reactivity	Human, Mouse, Rat, Rabbit, Monkey, Pig, Chicken, Xenopus, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	52kDa KDa

**NOVA1 Antibody (Internal) - Additional Information****Gene ID** 4857**Other Names**

RNA-binding protein Nova-1, Neuro-oncological ventral antigen 1, Onconeural ventral antigen 1, Paraneoplastic Ri antigen, Ventral neuron-specific protein 1, NOVA1

**Target/Specificity**

Human NOVA1. This antibody is expected to recognise all three reported isoforms (NP\_002506.2 ; NP\_006480.2 ; NP\_006482.1)

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

NOVA1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**NOVA1 Antibody (Internal) - Protein Information****Name** NOVA1 ([HGNC:7886](#))**Function**

Functions to regulate alternative splicing in neurons by binding pre-mRNA in a sequence-specific manner to activate exon inclusion or exclusion. It binds specifically to the sequences 5'-YCAAY-3' and regulates splicing in only a subset of regulated exons (PubMed:<a href="http://www.uniprot.org/citations/10811881" target="\_blank">10811881</a>). Binding to an exonic 5'-YCAAY-3' cluster changes the protein complexes assembled on pre-mRNA, blocking U1 snRNP binding and exon inclusion, whereas binding to an intronic 5'-YCAAY-3' cluster enhances spliceosome assembly and exon inclusion. Binding to 5'-YCAAY-3' clusters results in a local and asymmetric action to regulate spliceosome assembly and alternative splicing in neurons. Binding to an exonic 5'-YCAAY-3' cluster changed the protein complexes assembled on pre-mRNA, blocking U1 snRNP (small nuclear ribonucleoprotein) binding and exon inclusion, whereas binding to an

intronic 5'-YCAAY-3' cluster enhanced spliceosome assembly and exon inclusion. With NOVA1, they perform unique biological functions in different brain areas and cell types. Autoregulates its own expression by acting as a splicing repressor. 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. Acts to regulate a novel glycine receptor alpha-2 chain splice variant (alpha-2N) in developing spinal cord (By similarity).

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q9JKN6}.

**Tissue Location**

Expressed in cerebellum, brain stem, hippocampus, and frontal cortex.

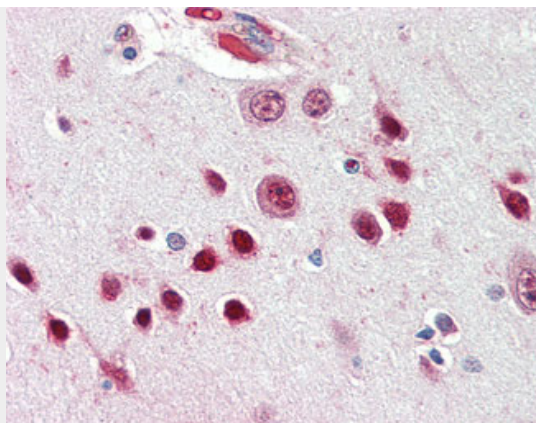
**NOVA1 Antibody (Internal) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

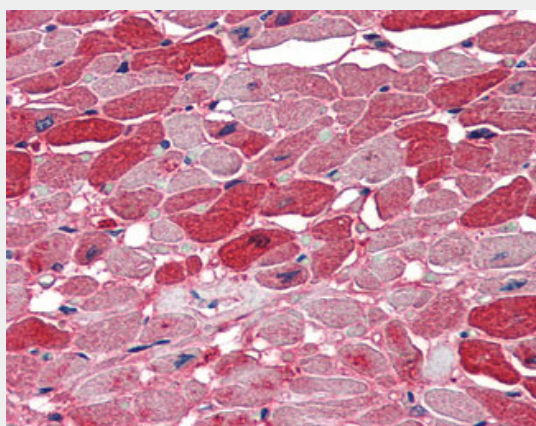
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**NOVA1 Antibody (Internal) - Images**

Antibody (0.01 ug/ml) staining of Human Breast Cancer lysate (35 ug protein in RIPA buffer).



Anti-NOVA1 antibody IHC of human brain, cortex.



Anti-NOVA1 antibody IHC of human heart.

#### **NOVA1 Antibody (Internal) - Background**

May regulate RNA splicing or metabolism in a specific subset of developing neurons.

#### **NOVA1 Antibody (Internal) - References**

Buckanovich R.J.,et al.Neuron 11:657-672(1993).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Venter J.C.,et al.Science 291:1304-1351(2001).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Dmitrenko V.V.,et al.Submitted (APR-1996) to the EMBL/GenBank/DDBJ databases.