

# Nova1 Rabbit mAb

**Catalog # AP75818** 

# **Specification**

#### Nova1 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB
P51513
Human, Mouse, Rat
Rabbit
Monoclonal Antibody
51727

#### Nova1 Rabbit mAb - Additional Information

**Gene ID 4857** 

Other Names NOVA1

**Dilution** WB~~1/500-1/1000

Format Liquid

#### Nova1 Rabbit mAb - 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'-YCAY- 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'-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. Binding to 5'-YCAY-3' clusters results in a local and asymmetric action to regulate spliceosome assembly and alternative splicing in 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, whereas binding to an intronic 5'-YCAY-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 Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Nova1 Rabbit mAb - Images

