

Nova1 Rabbit mAb

Catalog # AP75818

Product Information

Application	WB, IHC-P
Primary Accession	P51513
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	51727

Additional Information

Gene ID	4857
Other Names	NOVA1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	NOVA1 (HGNC:7886)
Function	RNA-binding protein which regulates alternative splicing of pre-mRNAs in the brain and spinal cord in a sequence-specific manner (By similarity). Binds to 5'-YCAAY-3' repeats, with a minimum of 2 to 3 repeats necessary for high-affinity binding. Mediates both exon inclusion and exclusion, depending upon the position of its binding site within the pre-mRNA (PubMed: 10811881). Binding to 5'-YCAAY-3' clusters results in a local and asymmetric action to regulate spliceosome assembly. Binding to an exonic 5'-YCAAY-3' cluster changes the protein complexes assembled on pre-mRNA, blocking U1 small nuclear ribonucleoprotein (snRNP) binding and inhibiting exon inclusion, whereas binding to an intronic 5'-YCAAY-3' repeat enhances spliceosome assembly and favors exon inclusion (By similarity). Regulates the splicing of gamma-aminobutyric acid receptor subunit gamma-2 (GABRG2) and glycine receptor subunit alpha-2 (GLRA2) pre-mRNAs, among others (By similarity). Autoregulates its own splicing. Binds to its own exon 4 and directs its exclusion, thus leading to NOVA1 isoform 3 production (By similarity). May

affect the splicing of many genes involved in vocal behavior (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9JKN6}.

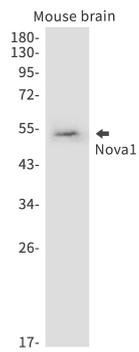
Tissue Location

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

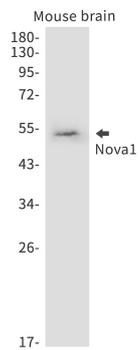
Background

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

Images



Western blot analysis of Nova1 in rat lung lysates using Nova1 antibody.



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