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NOVA2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18062a

Specification

NOVA2 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9UNW9
Other Accession	NP_002507.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**49009**
Antigen Region	**87-114**

NOVA2 Antibody (N-term) - Additional Information

Gene ID 4858

Other Names
RNA-binding protein Nova-2, Astrocytic NOVA1-like RNA-binding protein, Neuro-oncological ventral antigen 2, NOVA2, ANOVA, NOVA3

Target/Specificity
This NOVA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 87-114 amino acids from the N-terminal region of human NOVA2.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NOVA2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NOVA2 Antibody (N-term) - Protein Information

Name NOVA2 (HGNC:7887)

Synonyms ANOVA, NOVA3

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 related genes during cortical development, being essential for central nervous system development by regulating neural networks wiring. Regulates differentially alternative splicing on the same transcripts expressed in different neurons. This includes functional differences in 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).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:A0A1W2P872}.

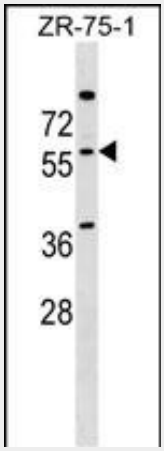
Tissue Location
Brain. Expression restricted to astrocytes.

NOVA2 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NOVA2 Antibody (N-term) - Images



NOVA2 Antibody (N-term) (Cat. #AP18062a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the NOVA2 antibody detected the NOVA2 protein (arrow).

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NOVA2 Antibody (N-term) - Background

NOVA2 may regulate RNA splicing or metabolism in a specific subset of developing neurons (By similarity). Binds single strand RNA.

NOVA2 Antibody (N-term) - References

Heinzen, E.L., et al. Am. J. Hum. Genet. 80(5):876-883(2007)
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