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NOVA2 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI11744

Specification

NOVA2 antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q9UNW9
Other Accession	NM_002516, NP_002507
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Bovine, Dog**
Predicted	**Human, Mouse, Rabbit, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**54kDa KDa**

NOVA2 antibody - N-terminal region - Additional Information

Gene ID 4858

Alias Symbol	**ANOVA, NOVA3**

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

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 100 ul of distilled water. Final anti-NOVA2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
NOVA2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

NOVA2 antibody - N-terminal region - 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}.

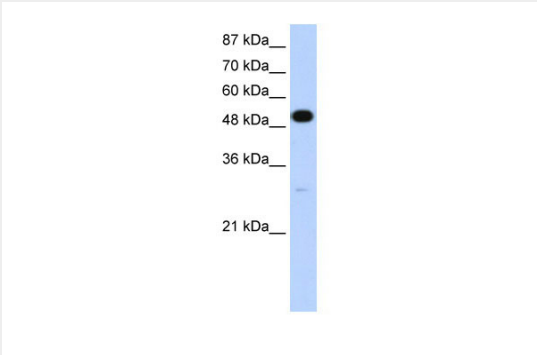
Tissue Location
Brain. Expression restricted to astrocytes.

NOVA2 antibody - N-terminal region - 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-terminal region - Images



WB Suggested Anti-NOVA2 Antibody Titration: 1.25µg/ml
Positive Control: HepG2 cell lysate

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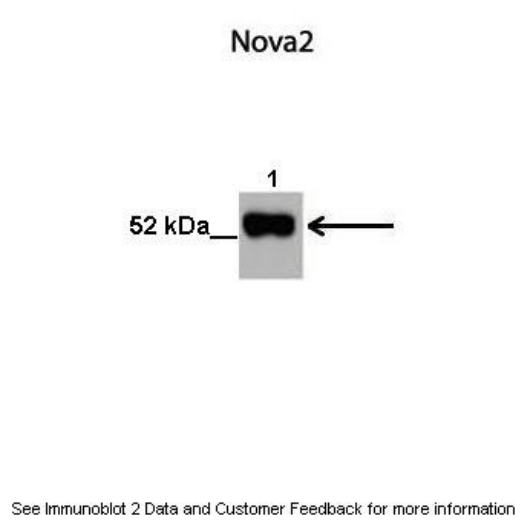

See Immunoblot 2 Data and Customer Feedback for more information

Lanes: 1. 10 ug human neural cell lysate
2. 10 ug human non-neural cell lysate

Primary Antibody Dilution: 1:1000
Secondary Antibody: Goat anti-rabbit IRDye 800 (1hr room temperature)
Secondary Antibody Dilution: 1:15,000
Gene Name: NOVA2
Submitted by: Dr. Monica Faronato, University of Liverpool

NOVA2 antibody - N-terminal region - References

Lewis,H.A., (2000) Cell 100 (3), 323-332Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.