

Anti-Caspr2/CNTNAP2 antibody ab153856

6 Images

Overview

Product name	Anti-Caspr2/CNTNAP2 antibody
Description	Rabbit polyclonal to Caspr2/CNTNAP2
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-Fr
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Human Caspr2/CNTNAP2 aa 287-633.
Positive control	WB: Molt-4, and mouse brain lysates; ICC/IF: HeLa cells and DIV14 rat E18 primary cortical neurons . IHC-Fr: E13.5 Rat brain and embryonic mouse brain (mE18.5).
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.00</p> <p>Preservative: 0.01% Thimerosal (merthiolate)</p> <p>Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab153856 in the following tested applications.

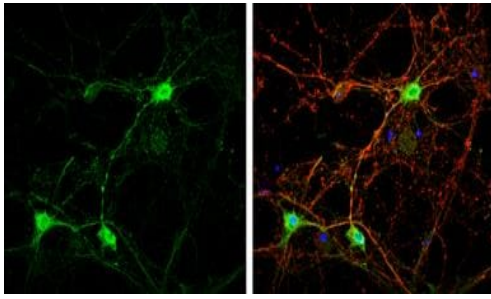
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000 - 1/20000. Predicted molecular weight: 148 kDa.
ICC/IF		1/100 - 1/1000.
IHC-Fr		1/250.

Target

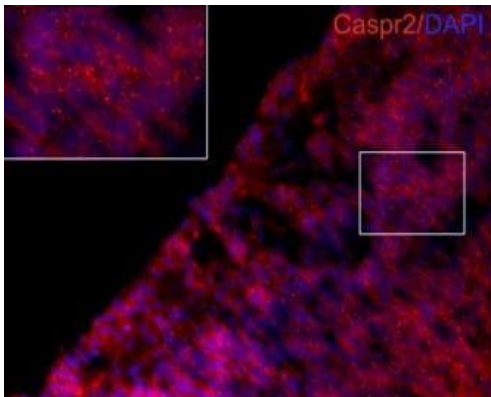
Function	May play a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. Seems to demarcate the juxtaparanodal region of the axo-glial junction.
Tissue specificity	Predominantly expressed in nervous system.
Involvement in disease	<p>Defects in CNTNAP2 are the cause of cortical dysplasia-focal epilepsy syndrome (CDFES) [MIM:610042]. Affected individuals manifest cortical dysplasia, focal epilepsy, relative macrocephaly, and diminished deep-tendon reflexes. Intractable focal seizures begin in early childhood, after which language regression, hyperactivity, impulsive and aggressive behavior, and mental retardation develop.</p> <p>Genetic variations in CNTNAP2 influences susceptibility to autism type 15 (AUTS15) [MIM:612100]. Autism is a neurodevelopmental disorder characterized by disturbance in language, perception and socialization. The disorder is classically defined by a triad of limited or absent verbal communication, a lack of reciprocal social interaction or responsiveness, and restricted, stereotypical, and ritualized patterns of interests and behavior.</p> <p>Note=A chromosomal aberration involving CNTNAP2 is found in a patient with autism spectrum disorder. Paracentric inversion 46,XY,inv(7)(q11.22;q35). The inversion breakpoints disrupt the genes AUTS2 and CNTNAP2.</p>
Sequence similarities	<p>Belongs to the neurexin family.</p> <p>Contains 2 EGF-like domains.</p> <p>Contains 1 F5/8 type C domain.</p> <p>Contains 1 fibrinogen C-terminal domain.</p> <p>Contains 4 laminin G-like domains.</p>
Cellular localization	Membrane.

Images



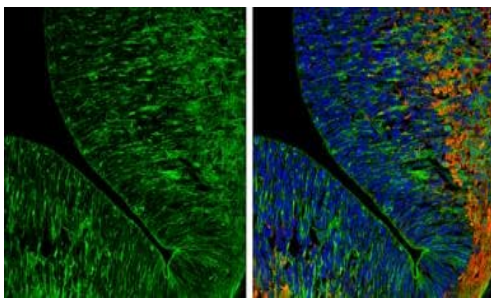
Immunocytochemistry/ Immunofluorescence - Anti-Caspr2/CNTNAP2 antibody (ab153856)

DIV14 rat E18 primary cortical neurons were fixed in 4% paraformaldehyde at RT for 15 min staining Caspr2/CNTNAP2 protein by immunofluorescent analysis (1:500) (green). Counter stained using beta Tubulin 3/ Tuj1, stained by beta Tubulin 3/ Tuj1 antibody [GT1338] (GTX631831) diluted at 1:500 (red) and DAPI (blue).



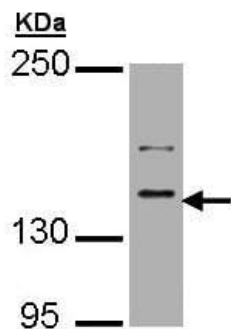
Immunohistochemistry (Frozen sections) - Anti-Caspr2/CNTNAP2 antibody (ab153856)

Frozen section of embryonic mouse brain (mE18.5) staining Caspr2/CNTNAP2 proteins in embryonic mouse brain by immunohistochemical analysis.
Red: ab153856 diluted at 1:250.
Blue: DAPI.



Immunohistochemistry (Frozen sections) - Anti-Caspr2/CNTNAP2 antibody (ab153856)

Frozen sectioned E13.5 Rat brain staining Caspr2/CNTNAP2 protein expression by immunohistochemical analysis.
Green: ab153856 diluted at 1:250.
Red: beta Tubulin 3/ TUJ1, a mature neuron marker, stained by beta Tubulin 3/ TUJ1 antibody diluted at 1:500.
Blue: Fluoroshield with DAPI.

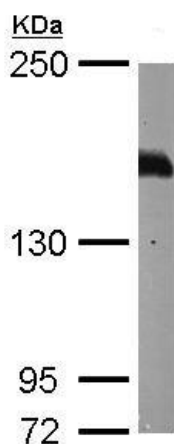


Western blot - Anti-Caspr2/CNTNAP2 antibody
(ab153856)

Anti-Caspr2/CNTNAP2 antibody (ab153856) at 1/5000 dilution +
Molt-4 whole cell lysate at 30 µg

Predicted band size: 148 kDa

5% SDS PAGE

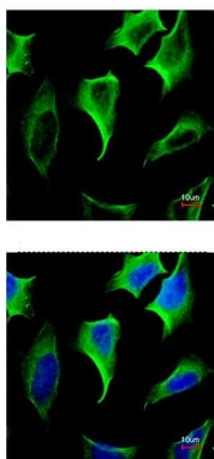


Western blot - Anti-Caspr2/CNTNAP2 antibody
(ab153856)

Anti-Caspr2/CNTNAP2 antibody (ab153856) at 1/10000 dilution +
Mouse brain whole cell lysate at 50 µg

Predicted band size: 148 kDa

5% SDS PAGE



Immunocytochemistry/ Immunofluorescence - Anti-
Caspr2/CNTNAP2 antibody (ab153856)

Immunofluorescent analysis of paraformaldehyde-fixed HeLa cells
labeling Caspr2/CNTNAP2 with ab153856 at 1/200 dilution. Lower
panel is merged with DNA probe.

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