

## DESCRIPTION

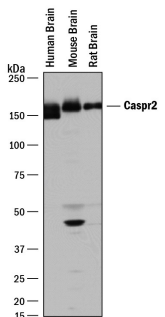
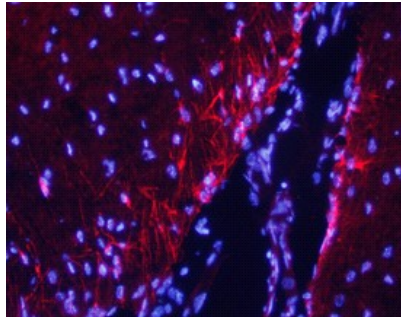
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human Caspr2 in direct ELISAs and human, mouse, and rat Caspr2 in Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human Caspr1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Caspr2 isoform 1 Pro29-Ala1262 Accession # Q9UHC6
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p> 	<p><b>Detection of Human, Mouse, and Rat Caspr2 by Western Blot.</b> Western blot shows lysates of human brain tissue, mouse brain tissue, and rat brain tissue. PVDF membrane was probed with 2 µg/mL of Sheep Anti-Human/Mouse/Rat Caspr2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5145) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Caspr2 at approximately 160-170 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Caspr2 in Mouse Brain.</b> Caspr2 was detected in perfusion fixed frozen sections of mouse brain using 10 µg/mL Sheep Anti-Human/Mouse/Rat Caspr2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5145) overnight at 4 °C. Tissue was stained with the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). View our protocol for <a href="#">Fluorescent IHC Staining of Frozen Tissue Sections</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Caspr2 (CNTNAP2, Contactin-associated protein-like 2 and Cell recognition molecule Caspr2) is a 160-170 kDa glycoprotein, a member of the neurexin family of proteins. It is predominantly expressed in nervous system and likely 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. Caspr2 and closely related molecule Caspr/Paranodin demarcate distinct subdomains in myelinated axons. While contactin-associated protein (Caspr) is present at the paranodal junctions, Caspr2 is precisely colocalized with Shaker-like K<sup>+</sup> channels in the juxtaparanodal region. Over aa 29-1262, human CASPR2 shares 94% aa sequence identity with mouse Caspr2.