Human/Mouse/Rat Caspr2 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF5145

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	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.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Caspr2 isoform 1 Pro29-Ala1262 Accession # Q9UHC6
Formulation	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.

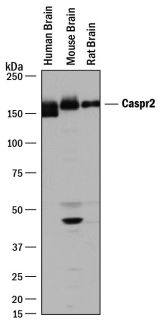
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

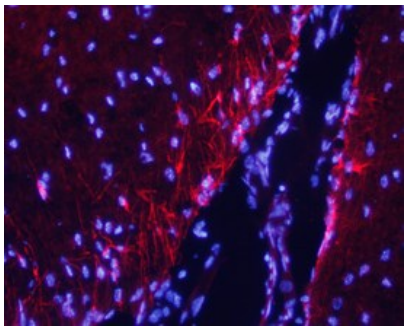
DATA

Western Blot



Detection of Human, Mouse, and Rat Caspr2 by Western Blot. 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 # 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.

Immunohistochemistry



Caspr2 in Mouse Brain. 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 # Catalog # NL010) and counterstained with DAPI (blue). View our protocol for Fluorescent IHC Staining of Frozen Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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+ channels in the juxtaparanodal region. Over aa 29-1262, human CASPR2 shares 94% aa sequence identity with mouse Caspr2.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449