

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Caspr1 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human Caspr2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Caspr1 Trp20-Gly1280 Accession # P78357
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CASPR1 (Contactin-Associated Protein-1; also Neurexin-4 and p190) is a 180-195 kDa member of the neurexin family of proteins. It is expressed on both axons and dendrites of neurons, and likely serves the critical function of directing the movement of low MW contactin, AMPA receptors, and Na⁺ plus K⁺ channels to appropriate sites on the cell membrane. This indicates participation in key processes such as myelination and excitatory neurotransmission. Mature human CASPR1 is a 1365 amino acid (aa) type I transmembrane protein. It contains a 1264 aa extracellular region (aa 20-1283) plus an 80 aa cytoplasmic domain. The extracellular region is highly modular, possessing one discoidin (carbohydrate-binding) domain (aa 24-158), four laminin G-like domains (aa 203-513, 813-956 and 1088-1250), two EGF-like domains (aa 540-577 and 957-996) and one fibrinogen C-terminal globular regions (aa 576-795). There is one potential alternative start site at Met507. Over aa 20-1280, human CASPR1 shares 94% aa sequence identity with mouse CASPR1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.