

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human, mouse, and rat Contactin-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse (rm) Contactin-2 and rmContactin-4 is observed.                                                                        |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Contactin-1<br>Asp21-Thr999<br>Accession # AAH66864                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

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

#### BACKGROUND

CNTN1 (Contactin-1; also neuronal cell surface protein F3/F11) is a 135-145 kDa GPI-linked glycoprotein member of the Contactin family, Ig superfamily of molecules. It is expressed on the surface of oligodendrocytes and neurons, principally on axons, and has multiple binding partners. In particular, it binds to astrocyte tenascin-C, Schwann cell NF/neurofascin-155, and oligodendrocyte produced tenascin-R and Notch in-trans, plus paranodin in-cis. Tenascin-R interactions inhibit neurite outgrowth, paranodin/NF155 interactions may contribute to Ranvier node development, and Notch ligation results in oligodendrocyte maturation. CNTN1 also binds to chondroitin sulfate-E, an interaction that initiates neurite outgrowth. Mouse CNTN1 is synthesized as a 1020 amino acid (aa) preproprecursor (aa 1-1020). It contains a 20 aa signal sequence, followed by a 981 aa mature region (aa 21-1001), and a 19 aa propeptide. The mature region possesses six consecutive C2-type Ig-like domains (aa 41-603) that regulate neurite outgrowth, followed by three FN-type III domains (aa 605-901) that regulate adhesiveness. It is estimated that 15% of the native MW constitutes carbohydrate, part of which is represented by the HNK-1 antigen (3-sulfo-GluA-Gal-GlcNac). Over aa 20-999, mouse CNTN1 shares 96% and 99% aa sequence identity with human and rat CNTN1, respectively.

#### 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.