



Monoclonal Anti-human Contactin-2/TAG1 Antibody

ORDERING INFORMATION

Catalog Number: MAB1714

Clone: 372944

Lot Number: YWZ01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human CNTN2

Immunogen: NS0-derived rhCNTN2

Ig class: mouse IgG_{2b}

Recommended Application:
Immunohistochemistry

Other Applications:
Direct ELISA
Western blot

Background

Contactin-2, also known as transient axonal glycoprotein 1 (TAG-1), is a 135 kDa GPI-anchored protein that is expressed on neurons and glial cells. The extracellular domain of contactin-2 consists of six Ig-like C2-set domains followed by four fibronectin type III domains. Contactin-2 is required for axonal migration and interacts homophilically at juxtaparanodal regions on myelinated fibers. Within the ECD, human Contactin-2 shares 93% aa sequence identity with mouse and rat Contactin-2.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Contactin-2 (rhCNTN2; aa 29 - 1012; Accession # NP_005067). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody was selected for its ability to detect human CNTN2 in direct ELISAs and Western blots. In these formats, this antibody shows no cross-reactivity with rhCNTN4, rhCNTN5, or rmCNTN3.

Applications

Western Blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human CNTN2. Using a colorimetric detection system, the detection limit for rhCNTN2 is approximately 25 ng/lane under non-reducing conditions. Use of this antibody under reducing conditions is not recommended. Chemiluminescent detection with WesternGlo™ Chemiluminescent Detection Substrate (R&D Systems Catalog # AR004) will increase sensitivity by 5 to 50 fold. In this application, the use of human CNTN2 monoclonal antibody, R&D Systems Catalog # MAB17141, is recommended.

Immunohistochemistry - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents and basic antigen retrieval to detect CNTN2 in paraffin-embedded normal human hippocampus tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CNTN2. The detection limit for rhCNTN2 is approximately 10 ng/well.

For immunohistochemistry images, please refer to our website at
<http://www.rndsystems.com/go/ihc>.

Optimal dilutions should be determined by each laboratory for each application.

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