

Product Information

Anti-CNTNAP2 (Internal) antibody produced in rabbit affinity isolated antibody

Catalog Number **SAB4200628**

Product Description

Anti-CNTNAP2 (Internal) is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal sequence of human CNTNAP2 (GeneID: 26047), conjugated to KLH. The corresponding sequence differs by a single amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-CNTNAP2 (internal) recognizes human, mouse and rat CNTNAP2. The antibody may be used in various immunochemical techniques including immunoblotting (~150 kDa) and immunoprecipitation. Detection of the CNTNAP2 band by immunoblotting is specifically inhibited by the immunizing peptide.

CNTNAP2 (contactin associated protein-like 2) also known as Caspr2 or AUTS15, is a member of the neurexin superfamily. CNTNAP2 is colocalized with Shaker-like K⁺ channels in the juxtaparanodal region in myelinated axons.¹⁻² CNTNAP2 mediates interactions between neurons and glia during nervous system development and is also involved in localization of potassium channels within differentiating axons.¹⁻³ There are neurobiological, genetic, and imaging evidences in both knockout mice and in humans bearing CNTNAP2 mutations, that this gene is a risk factor for ASD (Autism spectrum disorder) and related neurodevelopmental disorders.⁴⁻⁵

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 µg/mL is recommended using whole extracts of rat brain and 293T cells overexpressing human CNTNAP2. .

Immunoprecipitation: a working amount of 5-10 µg is recommended using extracts of mouse brain.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Poliak, S., et al., *J. Neurosci.*, **21**, 7568-7575 (2001).
2. Anderson, G.R., et al., *Proc. Natl. Acad. Sci. USA*, **109**, 18120–18125 (2012).
3. Poliak, S., et al., *Neuron*, **24**, 1037-1047 (1999).
4. Peñagarikano, O., et al., *Cell*, **147**, 235–246 (2011).
5. Peñagarikano, O., et al., *Trends Mol. Med.*, **18**, 156–163 (2012).

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