
Recombinant Mouse CNTNAP2 / CASPR2 Protein (His tag)**Cat.NO.: TP06602**

3th Edition

Synonyms:5430425M22Rik;Caspr2;mKIAA0868

Description:CNTNAP2/CASPR2 is a member of the neurexin family which functions in the vertebrate nervous system as cell adhesion molecules and receptors. This protein, like other neurexin proteins, contains epidermal growth factor repeats and laminin G domains. In addition, it includes an F5/8 type C domain, discoidin/neuropilin- and fibrinogen-like domains, thrombospondin N-terminal-like domains and a putative PDZ binding site. CNTNAP2/CASPR2 is localized at the juxtaparanodes of myelinated axons, and mediates interactions between neurons and glia during nervous system development and is also involved in localization of potassium channels within differentiating axons. This protein encoding gene is directly bound and regulated by forkhead box protein P2 (FOXP2), a transcription factor related to speech and language development. This gene has been implicated in multiple neurodevelopmental disorders, including Gilles de la Tourette syndrome, schizophrenia, epilepsy, autism, ADHD and mental retardation. CNTNAP2/CASPR2 may play a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. CNTNAP2/CASPR2 Seems to demarcate the juxtaparanodal region of the axo-glia junction.

Form:PBS**Molecular Weight:**139 kDa**Sequences:**Met 1-Ser 1262**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.