

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Contactin-4 in direct ELISA and Western blot. In direct ELISAs, approximately 35% cross-reactivity with recombinant human (rh) Contactin-4 is observed and less than 1% cross-reactivity with rhContactin-5, recombinant mouse (rm) Contactin-3 a
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Contactin-4 Asp19-Gly999 (Ile64Leu) Accession # Q69Z26
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
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

Contactin-4 (CNTN4), also known as BIG-2 (brain-derived immunoglobulin superfamily molecule 2), is an axonal cell adhesion molecule (AxCAM) that belongs to the contactin family, a subfamily of the Ig superfamily (1, 2). The contactin family comprises six members (CNTN1/F3, CNTN2/TAG-1, CNTN3/BIG-1, CNTN4/BIG-2, CNTN5/NB-2 and CNTN6/NB-3) that are characterized by the presence of six Ig like domains, four fibronectin type III-like repeats, and a glycosylphosphatidylinositol (GPI)-anchoring domain (1-4). Contactins are membrane-anchored proteins that can be released as soluble proteins by GPI-specific phospholipase D and are able to promote neurite outgrowth in their soluble form (2). Potential 1026, 705, and 498 amino acid (aa) isoforms of mouse CNTN4 have been described (1, 5). Only the longest isoform includes the C-terminal GPI anchoring sequence. It shares 97% aa identity with rat and 95% aa identity with human, equine and bovine CNTN4 in its mature 981 aa form. It also shares 42-64% aa identity with other CNTN family members, showing highest identity with CNTN3. CNTN4 is expressed throughout the brain, but minor amounts are also detected in small intestine, thyroid, uterus and testis (2, 4). Family members display overlapping but distinct expression patterns in rat brain and are suggested to influence the formation and maintenance of specific neuronal networks (2). In the olfactory bulb, CNTN4 is expressed in specific sensory neurons in a mosaic pattern that is closely correlated with odorant receptor choice, and is thought important for odor mapping (6, 7). In humans, disruption of CNTN4 has been implicated in the 3p deletion syndrome characterized by developmental and growth delay, and in autism spectrum disorder (8-10).

PRODUCT SPECIFIC NOTICES

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