

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Contactin-3 in direct ELISAs. In direct ELISAs, approximately 10% cross-reactivity with recombinant mouse Contactin-3 is observed, and less than 5% cross-reactivity with recombinant human (rh) Contactin-4 and rhContactin-5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Contactin-3 Pro26-Pro992 Accession # Q9P232
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

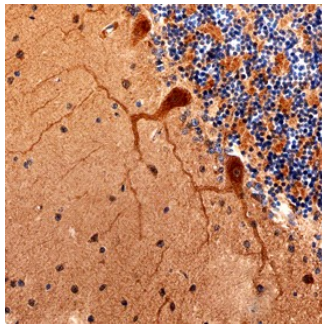
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Contactin-3 in Human Brain. Contactin-3 was detected in immersion fixed paraffin-embedded sections of human brain (cerebellum) using Sheep Anti-Human Contactin-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7125) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to Purkinje neurons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Contactin-3, also known as BIG-1, CNTN3 and PANG, is a 150 kDa member of the TAG/F3 subgroup of Contactin neuronal adhesion proteins (1, 2). Mature human Contactin-3 consists of six immunoglobulin-like domains, a flexible linker region, four fibronectin type III domains, and a GPI anchor (3, 4). Human Contactin-3 shares 92% aa sequence identity with mouse and rat Contactin-3. Contactin-3 is primarily expressed in the brain in discrete regions including the frontal lobe, occipital lobe, cerebellum, amygdala, and hippocampus (5, 6). Alternative splicing in rat may generate a soluble isoform (4). Mouse plasmacytoma cell lines produce multiple transcripts of Contactin-3 due to the presence of IAP proviruses (3). Immobilized Contactin-3 promotes neurite outgrowth from rat hippocampal neurons (4).

References:

1. Shimoda, Y. and K. Watanabe (2009) *Cell Adhesion Migration* 3:64.
2. Denisenko-Nehrbass, N. *et al.* (2002) *J. Physiol.* 96:99.
3. Connelly, M.A. *et al.* (1994) *Proc. Natl. Acad. Sci.* 91:1337.
4. Yoshihara, Y. *et al.* (1994) *Neuron* 13:415.
5. Kamei, Y. *et al.* (2000) *Genomics* 69:113.
6. Yoshihara, Y. *et al.* (1995) *J. Neurobiol.* 28:51.