

DESCRIPTION

Species Reactivity	Chicken
Specificity	Detects chicken Netrin-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant chicken Netrin-1 is observed and less than 1% cross-reactivity with recombinant human Netrin-4, recombinant mouse (rm) Netrin-G1a and rmNetrin-G2a is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant chicken Netrin-2 Ala16-Pro581 Accession # Q90923
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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
Western Blot	0.1 µg/mL	Recombinant Chicken Netrin-2 (Catalog # 127-N2)
Blockade of Receptor-ligand Interaction	In a functional ELISA, 1-5 µg/mL of this antibody will block 50% of the binding of 50 ng/mL of Recombinant Chicken Netrin-2 (Catalog # 127-N2) to immobilized Recombinant Rat UNC5H2 Fc Chimera (Catalog # 1006-UN) coated at 5 µg/mL (100 µL/well). At 100 µg/mL, this antibody will block >90% of the binding.	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

Netrins are laminin-like axon guidance molecules that are conserved among *C. elegans*, *Drosophila*, and vertebrates. The chicken Netrin-2 cDNA encodes a precursor protein that has structural similarity to the N-terminus of B2 or the γ-chain of laminin. The mature Netrin-2 protein has 581 amino acid (aa) which contains a 245 aa domain VI, a 169 aa domain V with three cysteine/glycine rich EGF repeats and a unique 152 aa domain C that enriches in basic aa residues and contains an RGD motif. Chicken Netrin-2 shares 72% aa identity with chicken Netrin-1, 51% aa identity with *C. elegans* UNC-6 protein and 57% aa identity with human NTN2L (Netrin-2-like). Although only two chicken netrins are known, the number of known mammalian netrins is growing. Mouse Netrin-3 and Netrin-4 were recently reported. Netrin-2 was expressed in the chick brain and spinal cord from E6 through to the adult. In addition, expression of Netrin-2 was observed at various stages in several mesodermally and endodermally derived tissues, including lung, gut, ovary, testes and spleen. Netrins act to both attract and repel the growing axons of a broad range of neuronal cell types during development. These actions are mediated by specific receptor complexes containing either the DCC (colorectal carcinoma) or neogenin, in the case of attractant, or UNC-5-related proteins, in the case of repellent.

References:

1. Serafini, T. *et al.* (1994) *Cell* **78**:409.
2. Kennedy, T.E. *et al.* (1994) *Cell* **78**:425.
3. Livesey, F.J. (1999) *Cell. Mol. Life Sci.* **56**:62.

PRODUCT SPECIFIC NOTICES

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U.S. Patent # 5,565,331, 6,096,866, 6,017,714, 6,309,638, 6,670,451, and other U.S. and international patents pending.