

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse NELL2 in direct ELISAs. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) NELL2 and less than 3% cross-reactivity with rhNELL1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NELL2 Leu25-Leu819 Accession # NP_058023
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

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

NELL2 (neural EGF-like protein 2) is a secreted, 130-140 kDa glycoprotein member of the EGF-like domain containing family, Laminin G/N-TSP1/Pentraxin gene superfamily of molecules. It is expressed in both fetal and postnatal neurons, being found in pyramidal and hypothalamic glutamatergic neurons, and in GABAergic cerebellar Purkinje cells. It has multiple functions, including the induction of GnRH release and the promotion of neuronal neurite extension and synapse formation. The mouse NELL2 precursor is 819 amino acids (aa) in length. It contains a 27 aa signal sequence plus a 792 aa mature region. The mature region possesses an N-terminal TSP domain (aa 33-261), two VWFC domains (aa 275-399), six consecutive EGF-like domains (aa 400-640), and three C-terminal VWFC domains (aa 641-816). Secreted NELL2 forms 400 kDa noncovalent homotrimers. There are four potential alternate splice forms. One utilizes an alternate start site at Met4, while a second shows a 16 aa substitution for aa 400-436. Based on rat, two other isoforms are likely to exist. A third isoform (cNELL2) should generate a 90 kDa phosphorylated cytosolic molecule that possesses a deletion of aa 22-64, while a fourth, 30 kDa isoform (NELL2-Tsp) should arise due to a premature truncation after Ala261. This last isoform is soluble and predicted to trimerize with full-length NELL2, yielding lower MW complexes. Over aa 24-819, mouse NELL2 shares 97% and 94% aa identity with rat and human NELL2, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.