

DESCRIPTION

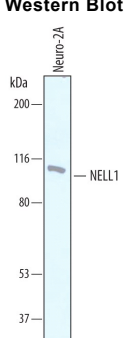
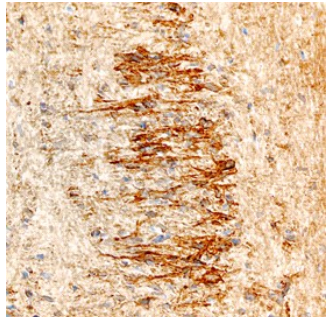
Species Reactivity	Mouse
Specificity	Detects mouse NELL1 in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant human NELL1 is observed and approximately 10% cross-reactivity with recombinant mouse NELL2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse NELL1 Arg17-Asn810 Accession # Q2VWQ2
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 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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Mouse NELL1 by Western Blot. Western blot shows lysates of Neuro-2A mouse neuroblastoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse NELL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7109) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for NELL1 at approximately 110 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>NELL1 in Mouse Embryo. NELL1 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using Sheep Anti-Mouse NELL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7109) at 5 µg/mL overnight at 4 °C. 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 neurons in the spinal cord. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>
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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

NELL1 (neural EGF-like like protein 1) is an 89 kDa (predicted) member of the EGF-like domain containing family, Laminin G/N-TSP1/Pentraxin gene superfamily of molecules. When secreted, NELL1 exists as a phosphoglycoprotein that can add as much as 50 kDa to the calculated MW. NELL1 has restricted expression, being limited to pre-B cells and osteoblasts, where it apparently promotes osteoblast maturation and bone formation. In tumors, it is found in neuroblastoma-derived cells. NELL1 is both secreted and retained intracellularly where it is phosphorylated by PKC. The mouse NELL1 precursor is 810 amino acids (aa) in length. It contains a 16 aa signal sequence plus a 794 aa mature region. The mature region possesses an N-terminal TSP domain (aa 81-230), two VWFC domains (aa 271-390), six consecutive EGF-like domains (aa 391-631), and three additional C-terminal VWFC domains (aa 632-807). Secreted NELL1 forms a 400-420 kDa noncovalent homotrimer. Over aa #17-810, mouse NELL1 shares 98% and 93% aa identity with rat and human NELL1, respectively.