Mouse NELL1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF7109

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 either lyophilized or as a 0.2 μm filtered solution in PBS.

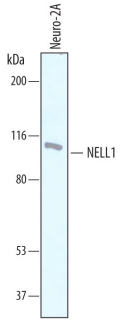
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

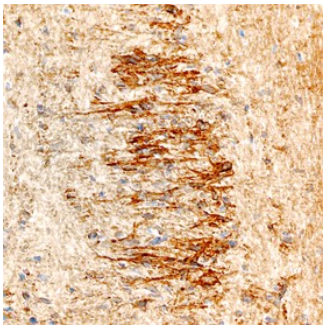
DATA

Western Blot



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.

Immunohistochemistry



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.

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.** ● 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.

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