Mouse NELL2 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6736V
100 µg

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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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 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

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475