Mouse Neogenin Alexa Fluor® 405-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 221519

Catalog Number: FAB1079V

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Neogenin in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse DCC is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 221519
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Neogenin Ala42-Ile1033 (Asp442-Leu461 del) Accession # NP_032710
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.*

Western Blot	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

Neogenin (NEO) is a type I transmembrane protein that is crucial for axonal guidance and neuronal migration. It is also involved in regulating differentiation programs in many embryonic and adult tissues (1). Mouse NEO is widely expressed in adult tissues and is expressed throughout the mid to late stages of gestation, in both neuronal and non-neuronal tissues. It is a member of the immunoglobulin (Ig) superfamily and is closely related to deleted in colorectal cancer (DCC). Mouse NEO cDNA encodes a 1493 amino acid residue (aa) precursor with a putative 36 aa signal peptide, a 1100 aa extracellular domain with six Ig-like C2 type domains and three fibronectin type III domains, a 21 aa transmembrane domain, and a 345 aa cytoplasmic domain. At least five isoforms are produced in mice by alternative splicing. Mouse NEO shares 96%, 93%, and 86% aa sequence identity with rat, human, and chicken NEO, respectively. It also has 46% and 29% sequence homology with mouse DCC and *C. elegans* UNC40, a homolog of DCC. NEO and DCC, together with the UNC5 family of type I transmembrane proteins, are receptors for the netrin/UNC6 family of laminin-related bifunctional guidance molecules that both attract some axons and repel others (2, 3). In mouse, at least five netrins (netrin-1, -3, -4, G1, and G2) have been identified (3-5). Mouse netrin-1 and netrin-3 have been shown to be ligands for mouse NEO.

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.

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