

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Notch-4 Intracellular Domain in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Notch-1 Intracellular Domain, rhNotch-2 Intracellular Domain, rhNotch-3,
Source	Monoclonal Rat IgG _{2A} Clone # 411913
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Notch-4 Intracellular Domain Gly1778-Lys2003 Accession # Q99466
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.
Immunocytochemistry	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

Notch-4 is a 250 kDa member of the NOTCH family of proteins. It is primarily expressed on endothelium. Human Notch-4 is a 1980 amino acid (aa) type I transmembrane (TM) glycoprotein that contains a 1424 aa extracellular domain (ECD) and a 535 aa cytoplasmic region. Notch-4 undergoes proteolytic processing at multiple sites. There is probable cleavage of the ECD by furin in the Golgi between aa 1310-1410. This creates a mature, potentially disulfide-linked heterodimer at the cell surface. Upon ligand binding, two sequential cleavages occur, one in the ECD after Ala1431, and a second in the TM domain after Lys1466. This creates a soluble cytoplasmic fragment that interacts with RBP-Jk and activates genes associated with HES-1. Over cytoplasmic aa 1778-2003, human Notch-4 is 78% aa identical to mouse Notch-4.

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.