

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 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

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