

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-1 RAPL2 in ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 167720
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-1 RAPL2 Thr17-Glu356 Accession # Q9NP60
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

The Interleukin 1 receptor family (IL-1 R) comprises at least eleven members including IL-1 RI (IL-1 R1), IL-1 RII (IL-1 R2), IL-1 RAcP (IL-1 R3), ST2 (T1/IL-1 R4), IL-18 R α (IL-1 Rrp/IL-1 R5), IL-1 Rrp2 (IL-1 RL2/IL-1 R6), IL-18 R β (AcPL/IL-1 R7), IL-1 RAPL1 (TIGIRR-2/IL-1 R8), and IL-1 RAPL2 (TIGIRR-1/IL-1 R9) (1). All family members possess three immunoglobulin (Ig)-like domains in their extracellular region. Most members also have an intracellular TIR (Toll-like receptor/IL-1 receptor signaling) domain that is also conserved in the Toll-like receptor family. Related proteins, SIGIRR (single Ig domain-containing IL-1 R-related molecule) and IL-18BP, differ from the other members by having only one Ig domain (1). IL-1 receptor accessory protein-like 2 (IL-1 RAPL2) is alternately known as IL-1 R9 and three immunoglobulin domain containing IL-1 receptor-related molecule 1 (TIGIRR-1) and is expressed in the brain (2). Its sequence predicts an 686 amino acid (aa) residue type I transmembrane glycoprotein with a 17 aa signal peptide, a 339 aa extracellular region containing three Ig-like domains, an 18 aa transmembrane domain and a 312 aa cytoplasmic tail (3). By comparison to other IL-1 receptor family proteins, IL-1 RAPL2 has a C-terminal cytoplasmic extension beyond the TIR domain that is found in IL-1 RAPL1 and SIGIRR but not other family members (3). Human and mouse IL-1 RAPL2 share approximately 95% aa sequence identity. Human IL-1 RAPL2 is most homologous (63%) to IL-1 RAPL1, a receptor protein that is highly expressed in hippocampus and is involved in X-linked mental retardation (4, 5). Genes for both have been localized to human chromosome Xq22. A ligand for IL-1 RAPL2 has not been identified (1).

PRODUCT SPECIFIC NOTICES

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