

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-1 Rrp2/IL-1 R6 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 116004
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-1 Rrp2/IL-1 R6 Asp20-Tyr337 Accession # Q9HB29
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.

Neutralization 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 Ra (IL-1 Rrp/IL-1 R5), IL-1 Rrp2 (IL-1 RL2/IL-1 R6), IL-18 Rb (AcPL/IL-1 R7), IL-1RAPL-1 (TIGIRR-2/IL-1 R8), and 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). Human IL-1 Rrp2 cDNA encodes a 561 amino acid (aa) residue precursor protein with a putative 19 aa signal peptide and a 318 aa extracellular domain. It shares 67% and 65% amino acid sequence identity with rat and mouse IL-1 Rrp2, respectively. IL-1 Rrp2 is expressed in lung epithelium, brain vasculature, kidney, testis, onocytes, skin-derived keratinocytes, fibroblasts and, to a lesser extent, endothelial cells (2, 3). IL-1 Rrp2 has been shown to mediate the activation of the transcription factor NFκB by the IL-1 family ligands IL-1 F6, F8 or F9 (also known as IL-1ε), with IL-1RAcP as a co-factor (3, 4). Response to IL-1 F9 is specifically antagonized by IL-1 F5 (also known as IL-1δ), an IL-1 family ligand that is most closely related to IL-1ra (3). IL-1 Rrp2, IL-1 F5, and IL-1 F9 are all up-regulated in lesional psoriasis skin, suggesting that the IL-1 Rrp2 mediated signaling pathway may take part in local inflammatory responses (3).

PRODUCT SPECIFIC NOTICES

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