

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL1RAPL2 in direct ELISAs and Western blots. In direct ELISAs, approximately 35% cross-reactivity with recombinant mouse IL1RAPL2 is observed. In Western blots, approximately 5% cross-reactivity with recombinant human (rh) IL-1 R7 is observed and less than 1% cross-reactivity with rhIL-1 R2 and rhIL-1 R8 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL1RAPL2 Thr17-Glu356 Accession # Q9NP60
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

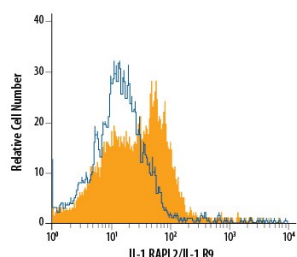
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human IL1RAPL2 Fc Chimera (Catalog # 1007-MR)
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human liver and skin
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

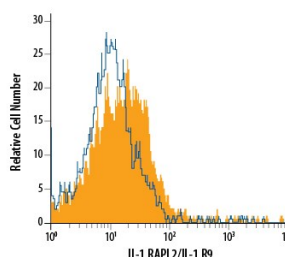
DATA

Flow Cytometry



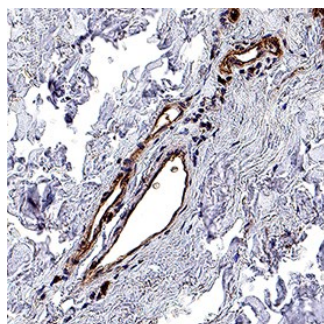
Detection of IL1RAPL2 in HepG2 Human Cell Line by Flow Cytometry. HepG2 human hepatocellular carcinoma cell line was stained with Goat Anti-Human IL1RAPL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1007, filled histogram) or control antibody (Catalog # [AB-108-C](#), open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # [F0108](#)).

Flow Cytometry



Detection of IL1RAPL2 in Hepa 1-6 Mouse Cell Line by Flow Cytometry. Hepa 1-6 mouse hepatoma cell line was stained with Goat Anti-Human IL1RAPL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1007, filled histogram) or control antibody (Catalog # [AB-108-C](#), open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # [F0108](#)).

N/A



IL1RAPL2 in Human Skin. IL1RAPL2 was detected in immersion fixed paraffin-embedded sections of human skin using Goat Anti-Human IL1RAPL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1007) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (red; Catalog # [VC004](#)) and counterstained with hematoxylin (blue). Specific staining was localized to cell membrane in endothelial cells in blood vessels. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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), IL1RAPL1 (TIGIRR-2/IL-1 R8), and IL1RAPL2 (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, IL1RAPL2 has a C-terminal cytoplasmic extension beyond the TIR domain that is found in IL1RAPL1 and SIGIRR but not other family members (3). Human and mouse IL1RAPL2 share approximately 95% aa sequence identity. Human IL1RAPL2 is most homologous (63%) to IL1RAPL1, 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 IL1RAPL2 has not been identified (1).

References:

1. Boraschi, D. and A. Tagliabue (2006) Vitam. Horm. **74**:229.
2. Andre, R. *et al.* (2005) J. Neurochem. **95**:324.
3. Born, T.L. *et al.* (2000) J. Biol. Chem. **275**:29946.
4. Jin, H. *et al.* (2000) Eur. J. Hum. Genet. **8**:87.
5. Carrie, A. *et al.* (1999) Nat. Genet. **23**:25.