

## DESCRIPTION

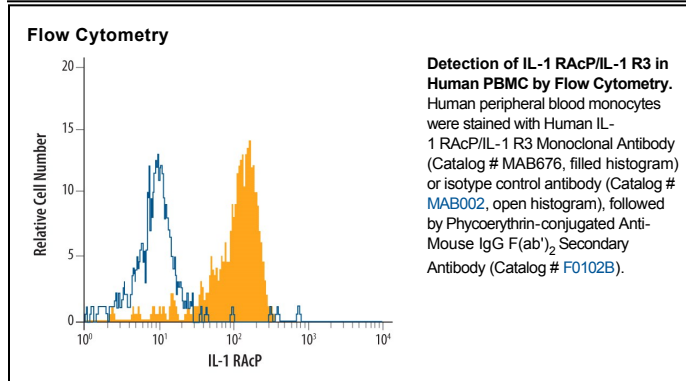
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-1RAcP/IL-1 R3 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 RI, rhIL-1 RII, rhST2, rhIL-18 R $\alpha$ , IL-1 Rrp2, rhIL-18 RAP, rhSIGIRR, rhIL-1 RAPL1, rhIL-1 RAPL2, rhTLR1, rhTLR2, rhTLR3, rhTLR4, rhTLR5, rhTLR7, rhTLR8, rhTLR9, rhTLR10, rhMD-1, rhMD-2, or recombinant mouse RP105 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 89412
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf21-derived recombinant human IL-1RAcP/IL-1 R3 Ser21-Glu359 (predicted) Accession # Q9NPH3
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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
<b>Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

IL-1 Receptor Accessory Protein (also IL-1 R3) is a ubiquitous 70-90 kDa member of the interleukin-1 receptor family of proteins (1-5). It serves as a non-ligand-binding accessory component of the receptors for IL-1 $\alpha$ , IL-1 $\beta$ , and IL-33 (6, 7). Together with IRAK4 and MyD88, it generates a functional signaling complex with IL-1 RI; by itself, it generates a non-signaling, but high-affinity binding complex with IL-1 RII (8). In addition, it interacts with ST2 on mast cells and Th2 T cells to create a functional IL-33 receptor complex (7). Mature human IL-1 RAcP is a type I transmembrane glycoprotein that is 550 amino acids in length. It contains a 347 amino acid (aa) extracellular region (aa 21-367), a 21 aa transmembrane segment, and a 182 aa cytoplasmic domain (9). The extracellular region shows three C2-type Ig-like domains, the most membrane proximal of which is suggested to be responsible for dimerization with IL-1 RI (10). There are three alternative splice forms reported for IL-1 RAcP. One is transmembrane and shows a 239 aa substitution for the C-terminal 122 amino acids (11). The other two are soluble; one shows a six aa substitution for aa 351-570, while a second shows a 45 aa substitution for aa 302-579 (12, 13). The soluble receptor isoforms appear to be inhibitory to IL-1 signaling. When present with soluble IL-1 RII, soluble IL-1 RAcP increases the IL-1 binding affinity of IL-1 RII more than 100-fold, thus neutralizing the effects of IL-1 (14). The human and mouse IL-1 RAcP precursors are 89% aa identical; within the extracellular region, they share 86% aa identity.

**References:**

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