

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-9 R in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-4 R, rhIL-5 R $\alpha$ , rhIL-5 R $\beta$ , rhIL-13 R $\alpha$ 1, rhIL-13 R $\alpha$ 2, or recombinant mouse IL-9 R is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 33423
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-9 R
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<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 either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

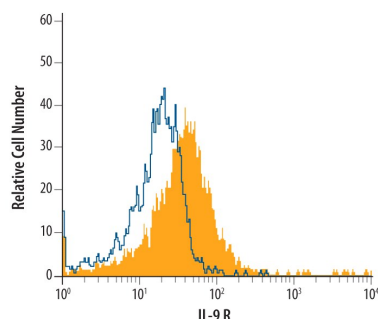
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25 $\mu$ 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.	
<b>Neutralization</b>	Measured by its ability to neutralize IL-9-induced proliferation in the MO7e human megakaryocytic leukemic cell line. Avanzi, G. <i>et al.</i> (1988) Br. J. Haematol. <b>69</b> :359. The Neutralization Dose (ND <sub>50</sub> ) is typically 2-4 $\mu$ g/mL in the presence of 2 ng/mL Recombinant Human IL-9.	

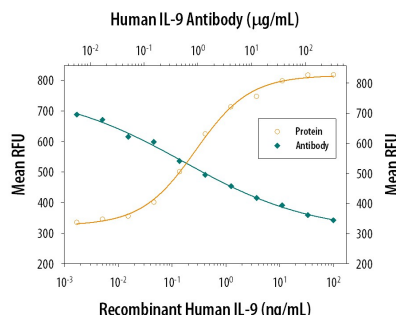
## DATA

### Flow Cytometry



**Detection of IL-9 R in Human Monocytes by Flow Cytometry.** Human whole blood monocytes were stained with Mouse Anti-Human IL-9 R Subunit Monoclonal Antibody (Catalog # MAB290, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG F(ab')<sub>2</sub> Secondary Antibody (Catalog # F0102B).

### Neutralization



**Cell Proliferation Induced by IL-9 and Neutralization by Human IL-9 R Antibody.** Recombinant Human IL-9 (Catalog # 209-IL) stimulates proliferation in the MO7e human megakaryocytic leukemic cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human IL-9 (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human IL-9 R Subunit Monoclonal Antibody (Catalog # MAB290). The ND<sub>50</sub> is typically 2-4  $\mu$ g/mL.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

Interleukin 9 Receptor (IL-9 R) belongs to the hematopoietin receptor superfamily and is the binding subunit of the heterodimeric IL-9 receptor complex. The other subunit is the common  $\gamma$  chain shared with the receptors for IL-2, IL-4, IL-7, and IL-15. IL-9 R is expressed by T cells, neutrophils, mast cells, and macrophages.