

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-9 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant rat IL-9 or recombinant mouse IL-9 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 623153
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-9 Gln19-Ile144 Accession # P15248
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 as a 0.2 µm filtered solution in PBS.

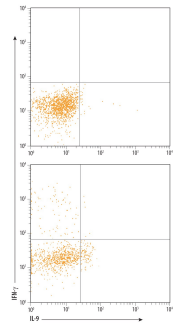
APPLICATIONS

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
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Intracellular Staining by Flow Cytometry



Detection of IL-9 in Human PBMC by Flow Cytometry. Human PBMC untreated (top panel) or treated with 50 ng/mL PMA and 500 ng/mL calcium ionomycin for 24 hours (bottom panel) were stained with Mouse Anti-Human IL-9 Monoclonal Antibody (Catalog # MAB209) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B) and Human IFN-γ Fluorescein-conjugated Monoclonal Antibody (Catalog # IC285F). Quadrant markers were set based on control antibody staining (Catalog # MAB0041). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Interleukin-9 (IL-9) is a 14 kDa glycosylated cytokine that is secreted by CD4⁺ Th2 cells. It supports the growth of multiple hematopoietic cell types including Th cells, germinal center B cells, macrophages, mast cells, neutrophils, megakaryocytes, and erythrocytes. IL-9 exerts its biological effects through a receptor complex composed of IL-9 R and the common gamma chain. Mature human IL-9 shares 57% amino acid sequence identity with mouse and rat IL-9.