

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCL8/IL-8 in ELISAs and Western blots. In Western blots, this antibody shows 100% cross-reactivity with recombinant porcine CXCL8/IL-8 and no cross-reactivity with recombinant rat CXCL3/CINC-2β.
Source	Monoclonal Mouse IgG ₁ Clone # 6217
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CXCL8/IL-8 Ser28-Ser99 Accession # P10145
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

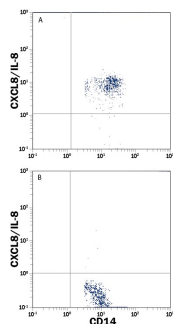
APPLICATIONS

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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of CXCL8/IL-8 in Human Blood Monocytes by Flow Cytometry. Human peripheral blood monocytes treated with LPS were stained with Mouse Anti-Human CXCL8/IL-8 Fluorescein-conjugated Monoclonal Antibody (Catalog # IC208F) and Mouse Anti-Human CD14 PE-conjugated Monoclonal Antibody (Catalog # FAB3832P), as shown in panel A. Inhibition of IC208F staining by the addition of excess Recombinant Human IL-8 (Catalog # 208-IL) is shown in panel B. Quadrant markers were set based on control antibody staining (Catalog # IC002F). 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

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

CXCL8/IL-8 is an 8-9 kDa member of the CXCL subfamily of chemokines. It was originally discovered and purified independently by a number of laboratories as a neutrophil chemotactic and activating factor. It has also referred to as Neutrophil Activating Protein (NAP), Monocyte-derived Neutrophil Chemotactic Factor (MDNCF) and granulocyte chemotactic protein (GCP). Many cell types, including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, keratinocytes, hepatocytes, chondrocytes, and mammary plus alveolar epithelium can produce CXCL8 in response to a wide variety of stimuli, such as IL-1b, TNF-α, LPS, MRP-8/14 and viruses. When secreted, it circulates as both a monomer and dimer, with the dimeric forms being a homodimer and heterodimer with CXCL4/PF4. CXCL8 binds to CXCR-1 and -2, with the CXCL8 monomer favoring CXCR-1, and the CXCL8 homodimer favoring CXCR-2 and glycosaminoglycans. CXCL8 is a potent chemoattractant for neutrophils. In addition, CXCL8 also has a wide range of other pro-inflammatory effects. CXCL8 causes degranulation of neutrophil specific granules and azurophilic granules. It also induces expression of the cell adhesion molecules CD11/CD18, and enhances the adherence of neutrophils to endothelial cells and sub-endothelial matrix proteins. Besides neutrophils, CXCL8 is also chemotactic for basophils, T cells and eosinophils. CXCL8 has been reported to be a co-mitogen for keratinocytes, and has also shown to be an autocrine growth factor for melanoma cells. CXCL8 is also reported to be angiogenic both *in vivo* and *in vitro*. There is no direct structural rodent counterpart to human IL-8.