

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-8/CXCL8 in ELISAs and Western blots. In Western blots, less than 5% cross-reactivity with recombinant porcine IL-8/CXCL8, recombinant rat (rr) CINC-2 $\alpha$ , and rrCINC-2 $\beta$ is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	E. coli-derived recombinant human IL-8/CXCL8 Ser28-Ser99 Accession # P10145
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

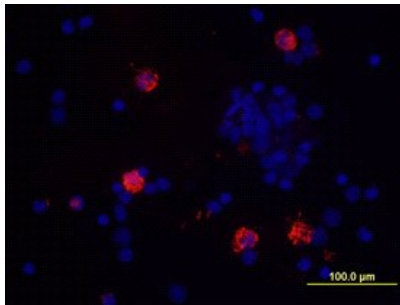
## APPLICATIONS

**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>Western Blot</b>	0.1 $\mu$ g/mL	Recombinant Human IL-8/CXCL8 (Catalog # 208-IL)
<b>Immunocytochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>Human IL-8/CXCL8 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 $\mu$ g/mL	Human IL-8/CXCL8 Antibody (Catalog # MAB208)
<b>ELISA Detection</b>	0.1-0.4 $\mu$ g/mL	Human IL-8/CXCL8 Biotinylated Antibody (Catalog # BAF208)
<b>Standard</b>		Recombinant Human IL-8/CXCL8 (Catalog # 208-IL)

## DATA

### Immunocytochemistry



#### IL-8/CXCL8 in Human PBMCs.

IL-8/CXCL8 was detected in immersion fixed PMA-, ionomycin- and monensin-activated human peripheral blood mononuclear cells (PBMCs) using Human IL-8/CXCL8 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF208) at 10  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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.
<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

CXCL8 was originally discovered and purified independently by a number of laboratories as a neutrophil chemotactic and activating factor. It was also referred to as neutrophil chemotactic factor (NCF), neutrophil activating protein (NAP), monocyte-derived neutrophil chemotactic factor (MDNCF), T-lymphocyte chemotactic factor (TCF), granulocyte chemotactic protein (GCP) and leukocyte adhesion inhibitor (LAI). Many cell types, including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, keratinocytes, hepatocytes, chondrocytes, and various tumor cell lines, can produce CXCL8 in response to a wide variety of pro-inflammatory stimuli such as exposure to IL-1, TNF, LPS, and viruses. CXCL8 is a member of the alpha (CXC) subfamily of chemokines, which also includes platelet factor 4, GRO, IP-10, etc.

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. CXCL8 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 was also shown to be an autocrine growth factor for melanoma cells. CXCL8 was also reported to be angiogenic both *in vivo* and *in vitro*.