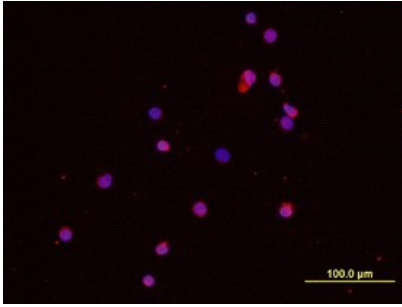
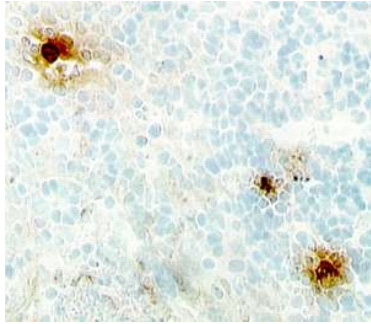
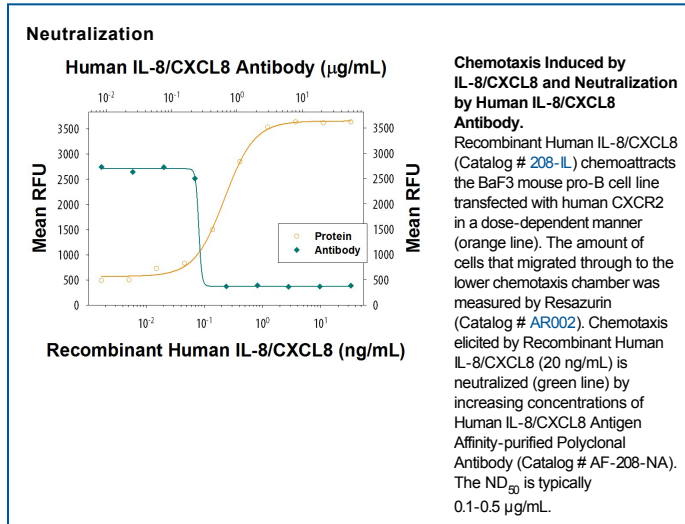


DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-8/CXCL8 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant canine IL-8/CXCL8, recombinant feline IL-8/CXCL8 and recombinant porcine IL-8/CXCL8 is observed.
<b>Source</b>	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>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	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		
<b>Please Note:</b> Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human IL-8/CXCL8 (Catalog # 208-IL)
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Neutralization</b>	Measured by its ability to neutralize IL-8/CXCL8-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND <sub>50</sub> ) is typically 0.1-0.5 µg/mL in the presence of 20 ng/mL Recombinant Human IL-8/CXCL8.	

DATA	
<p><b>Immunocytochemistry</b></p>  <p><b>IL-8/CXCL8 in Human PBMCs.</b> IL-8/CXCL8 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) stimulated with PMA and ionomycin using 10 µg/mL Human IL-8/CXCL8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-208-NA) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>IL-8/CXCL8 in Human Tonsil.</b> IL-8/CXCL8 was detected in immersion fixed paraffin-embedded sections of human tonsil (surgically removed due to severe EBV-induced mononucleosis) using Human IL-8/CXCL8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-208-NA) overnight at 4 °C. Tissue was stained (brown) and counterstained with hematoxylin (blue). View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>



#### PREPARATION AND STORAGE

**Reconstitution** Reconstitute at 0.2  $\text{mg/mL}$  in sterile PBS.

**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  $^{\circ}\text{C}$

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70  $^{\circ}\text{C}$  as supplied.
- 1 month, 2 to 8  $^{\circ}\text{C}$  under sterile conditions after reconstitution.
- 6 months, -20 to -70  $^{\circ}\text{C}$  under sterile conditions after reconstitution.

#### 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*.