

**DESCRIPTION**

<b>Species Reactivity</b>	Feline
<b>Specificity</b>	Detects feline IL-8/CXCL8 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant canine IL-8/CXCL8 is observed and 15% cross-reactivity with recombinant porcine IL-8/CXCL8 and recombinant human IL-8/CXCL8 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	E. coli-derived recombinant feline IL-8/CXCL8 Ala23-Ala101 Accession # Q9XSX5.1
<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**

**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 µg/mL	Recombinant Feline IL-8/CXCL8 (Catalog # 2277-FL)
<b>Immunocytochemistry</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 0.1-0.4 µg/mL in the presence of 20 ng/mL Recombinant Feline IL-8/CXCL8.	

**DATA**

**Neutralization**

**Chemotaxis Induced by IL-8/CXCL8 and Neutralization by Feline IL-8/CXCL8 Antibody.**  
Recombinant Feline IL-8/CXCL8 (Catalog # 2277-FL) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR2 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Feline IL-8/CXCL8 (20 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Feline IL-8/CXCL8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2277). The ND<sub>50</sub> is typically 0.1-0.4 µg/mL.

**Immunocytochemistry**

**IL-8/CXCL8 in Feline PBMCs.** IL-8/CXCL8 was detected in immersion fixed feline peripheral blood mononuclear cells (PBMCs) using Goat Anti-Feline IL-8/CXCL8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2277) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm. 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. *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 8 (IL-8), also named CXCL8, monocyte-derived neutrophil chemotactic factor (MDNCF), neutrophil-activating protein 1 (NAP-1), neutrophil-activating factor (NAF) and granulocyte chemotactic peptide (GCP), belongs to the Glu-Leu-Arg motif containing (ELR+) CXC chemokine family and has been designated CXCL8. IL-8 is a potent neutrophil chemoattractant that recruits neutrophils to sites of inflammation. IL-8 also activates neutrophil functions and promotes angiogenesis. The biological activities of IL-8 is mediated by two types of G protein-coupled chemokine receptors, CXCR1 and CXCR2 (1, 2). In normal tissues, IL-8 expression and secretion is barely detectable. Upon stimulation by a wide range of pro-inflammatory signals including exposure to IL-1, TNF, bacterial or viral products, IL-8 production is rapidly induced in many different cell types (3, 4). Feline IL-8 encodes a 101 amino acid (aa) precursor protein with a putative 22 aa signal peptide. It shares 61% and 76% aa sequence identity with human and canine IL-8, respectively.

**References:**

1. Van Damme, J. *et al.* (1998) *The Cytokine Handbook*, A.W. Thomson, ed., Academic Press, NY p. 271.
2. Heidemann, J. *et al.* (2003) *J. Biol. Chem.* **178**:8508.
3. Yang, M.P. *et al.* (2002) *Vet. Immunol. Immunopathol.* **86**:43.
4. Parhar, K. *et al.* (2003) *Immunology* **108**:502.