

## DESCRIPTION

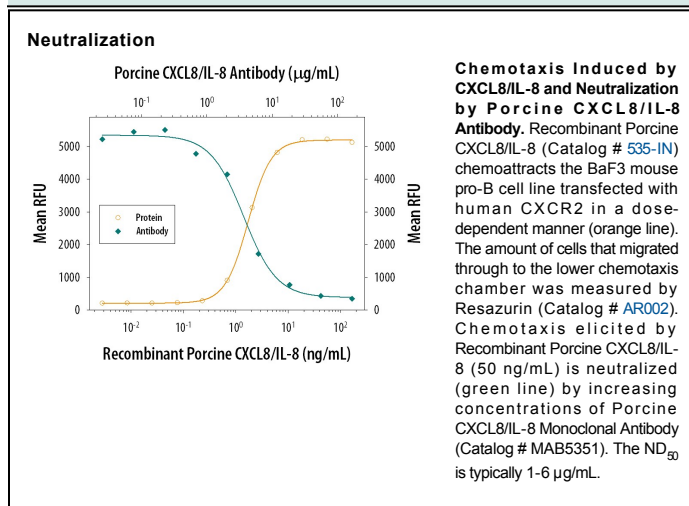
<b>Species Reactivity</b>	Porcine
<b>Specificity</b>	Detects porcine CXCL8/IL-8 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) CXCL1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12/SDF-1 $\alpha$ , 12/SDF-1 $\beta$ , rhCXCL13, recombinant mouse CXCL1, 2, 6, 9, 10, 12/SDF-1 $\alpha$ , rmCXCL13, recombinant rat (r) CXCL1, rCXCL3/CINC2 $\alpha$ , or rr3/CINC-2 $\beta$ is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 105105
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant porcine CXCL8/IL-8 Ala26-Gln104 Accession # CAA43461
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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
<b>Western Blot</b>	1 $\mu$ g/mL	Recombinant Porcine CXCL8/IL-8 (Catalog # 535-IN) under non-reducing conditions only
<b>Porcine CXCL8/IL-8 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 $\mu$ g/mL	Porcine CXCL8/IL-8 Antibody (Catalog # MAB5351)
<b>ELISA Detection Standard</b>	0.1-0.4 $\mu$ g/mL	Porcine CXCL8/IL-8 Biotinylated Antibody (Catalog # BAF535) Recombinant Porcine CXCL8/IL-8 (Catalog # 535-IN)
<b>Neutralization</b>		Measured by its ability to neutralize CXCL8/IL-8-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-6 $\mu$ g/mL in the presence of 50 ng/mL Recombinant Porcine CXCL8/IL-8.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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 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 IL-8 in response to a wide variety of pro-inflammatory stimuli such as exposure to IL-1, TNF, LPS, and viruses. IL-8 is a member of the alpha (C-X-C) subfamily of chemokines, which also includes platelet factor 4, GRO, IP-10, *etc.*

IL-8 is a potent chemoattractant for neutrophils. In addition, IL-8 also has a wide range of other pro-inflammatory effects. IL-8 causes degranulation of neutrophil specific granules and azurophilic granules. IL-8 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, IL-8 is also chemotactic for basophils, T cells and eosinophils. IL-8 has been reported to be a co-mitogen for keratinocytes and was also shown to be an autocrine growth factor for melanoma cells. Recently, IL-8 was reported to be angiogenic both *in vivo* and *in vitro*.

## References:

1. Van Damme, J. *et al.* (1998) in *The Cytokine Handbook*, A.W. Thomson ed., Academic Press, New York. p. 271.