

DESCRIPTION

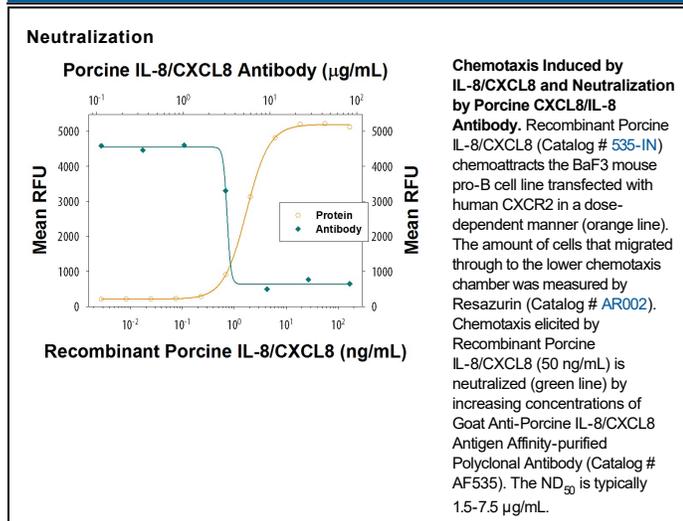
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|---------------------------|---|
| Species Reactivity | Porcine |
| Specificity | Detects human IL-8/CXCL8 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human IL-8 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | E. coli-derived recombinant porcine IL-8/CXCL8 Ala26-Gln104 Accession # CAA43461 |
| Endotoxin Level | <0.10 EU per 1 µg of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

| | Recommended Concentration | Sample |
|-----------------------|----------------------------------|--|
| Western Blot | 0.1 µg/mL | Recombinant Porcine IL-8/CXCL8 (Catalog # 535-IN) |
| Neutralization | | 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 ₅₀) is typically 1.5-7.5 µg/mL in the presence of 50 ng/mL Recombinant Porcine IL-8/CXCL8. |

DATA



PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Reconstitute at 0.2 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 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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.