

DESCRIPTION

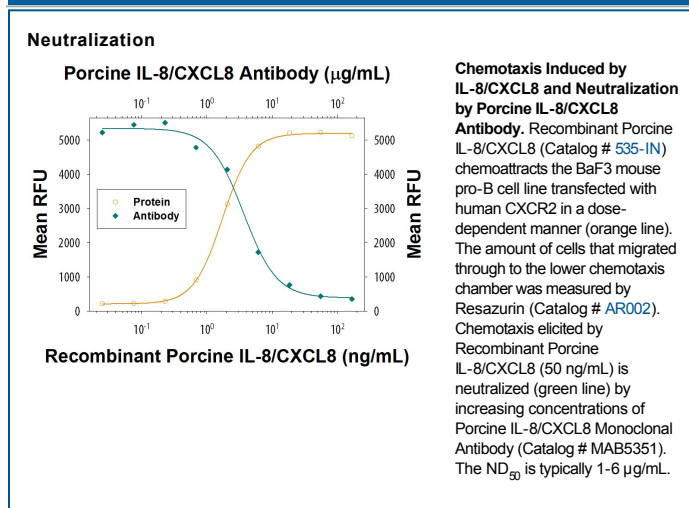
Species Reactivity	Porcine
Specificity	Detects porcine IL-8/CXCL8 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) CXCL1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12/SDF-1 α , 12/SDF-1 β , rhCXCL13, recombinant mouse CXCL1, 2, 6, 9, 10, 12/SDF-1 α , rmCXCL13, recombinant rat (rr) CXCL1, rrCXCL3/CINC2 α , or rr3/CINC-2 β is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 105105
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant porcine IL-8/CXCL8 Ala26-Gln104 Accession # CAA43461
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ 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
Western Blot	1 μ g/mL	Recombinant Porcine IL-8/CXCL8 (Catalog # 535-IN) under non-reducing conditions only
Porcine IL-8/CXCL8 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Porcine IL-8/CXCL8 Antibody (Catalog # MAB5351)
ELISA Detection Standard	0.1-0.4 μ g/mL	Porcine IL-8/CXCL8 Biotinylated Antibody (Catalog # BAF535) 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 1-6 μ g/mL in the presence of 50 ng/mL Recombinant Porcine IL-8/CXCL8.

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.