

DESCRIPTION

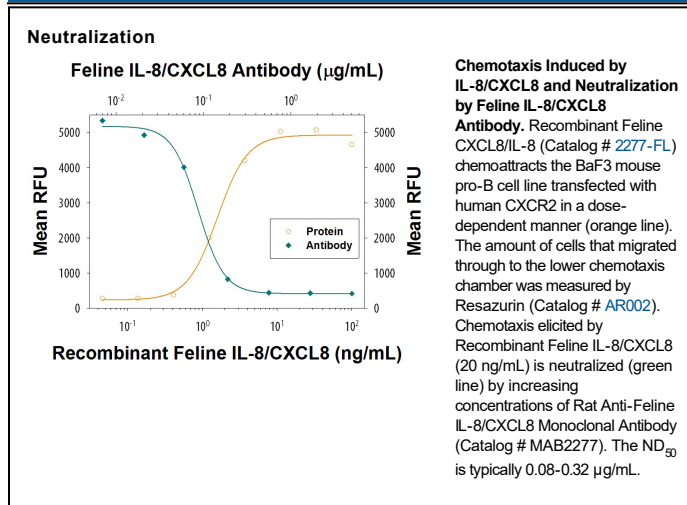
Species Reactivity	Feline
Specificity	Detects feline IL-8/CXCL8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with over 75 tested chemokines of human, mouse, rat, porcine, or viral origin was observed.
Source	Monoclonal Rat IgG _{2B} Clone # 344609
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant feline IL-8/CXCL8 Ala23-Ala101 Accession # Q9XSX5.1
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	1 µg/mL	Recombinant Feline IL-8/CXCL8 (Catalog # 2277-FL)
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 0.08-0.32 µg/mL in the presence of 20 ng/mL Recombinant Feline 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 (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.