

DESCRIPTION

Species Reactivity	Canine
Specificity	Detects canine CXCL8/IL-8 in direct ELISAs and Western blots. Does not cross-react with recombinant human CXCL1, 2, 3, 5, 6, 7, 8, 9, 10, 11, CXCL12/SDF-1α, 12/SDF-1β, 13, 16, recombinant mouse CXCL1, 6, 9, 10, CXCL12/SDF-1α, 13, recombinant rat (rr)
Source	Monoclonal Mouse IgG ₁ Clone # 258911
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant canine CXCL8/IL-8 Ala23-Pro101 Accession # P41324
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 8 (IL-8), also named 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 through a poorly understood mechanism, promotes angiogenesis. The biological activities of IL-8 is mediated by two types of G protein-coupled chemokine receptors, CXCR1 and CXCR2. 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. Secreted IL-8 is not glycosylated but has N-terminal sequence heterogeneity due to proteolytic processing. In human, two major forms, the 72 amino acid (aa) monocyte-derived IL-8 and the 77 aa endothelial IL-8 have been identified. Whereas the 72 aa isoform is a more potent chemoattractant, only the 77 aa isoform can induce apoptosis in leukemic cells. The N-terminal pentapeptide in the 77 aa isoform has been identified as the active site for the IL-8 apoptotic activity. Canine IL-8 encodes a 101 aa precursor protein with a putative 22 aa signal peptide. It shares 77% and 87% aa sequence identity with human and porcine IL-8, respectively. Similar to human IL-8, recombinant canine IL-8 also undergoes N-terminal processing. Two major peptides (the 79 aa and 74 aa variants that differ by an analogous N-terminal pentapeptide) are present in the recombinant canine IL-8 preparations.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.