



## Genorise<sup>®</sup> Recombinant Canine IL-8

Catalog Number: GR104104

### Background

IL-8 was renamed CXCL8 by the Chemokine Nomenclature Subcommittee of the International Union of Immunological Societies (1), although its approved HUGO gene symbol remains IL8. CXCL8 was also referred to as neutrophil chemotactic factor (NCF), neutrophil activating protein (NAP), monocyte-derived neutrophil chemotactic factor (MDNCF), Tlymphocyte 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 CXCL8 in response to a wide variety of proinflammatory stimuli such as exposure to IL1, TNF, LPS, and viruses. CXCL8 is a potent chemoattractant for neutrophils. In addition, CXCL8 also has a wide range of other proinflammatory effects. CXCL8 is also a potent angiogenic factor. CXCL8 causes degranulation of neutrophil specific granules and azurophilic granules. CXCL8 induces expression of the cell adhesion molecules CD11/CD18 and enhances the adherence of neutrophils to endothelial cells and subendothelial matrix proteins. Besides neutrophils, CXCL8 is also chemotactic for basophils, T cells and eosinophils. CXCL8 has been reported to be a comitogen for keratinocytes and was also shown to be an autocrine growth factor for melanoma cells. It is a key parameter in localized inflammation (2). It has been cited as a proinflammatory mediator in gingivitis and psoriasis (3).

### References

1. Bacon K, et al (October 2002). *J. Interferon Cytokine Res.* 22 (10): 1067–8.
2. Vlahopoulos S, et al. (September 1999). *Blood* **94** (6): 1878–89.
3. Utgaard JO, et al (November 1998). *J. Exp. Med.* **188** (9): 1751–6.



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### Description

Size: 5 µg

Accession #: P41324

Sources: expressed in *E. coli*.

Composition: Ser29-Pro101

Molecular weight: 8 kDa

Activity: Measured by its ability to induce myeloperoxidase release from cytochalasin B-treated human neutrophils. JM Schroder et al (1987) J Immunol 139:3474.

The ED50 for this effect is 0.2-0.4 µg/ml.

Endotoxin level: < 1.0 EU per 1 µg of the protein by the LAL method.

Purity: > 98%, by SDS-PAGE under reducing conditions and visualized by silver staining.

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.

Reconstitution: Reconstitute at 20 µg/ml in sterile PBS with 0.05% azide and store at -20°C ~ -70°C for up to 3 months.

Shipping and storage: The product is shipped at 4°C with ice pad or ambient temperature. Upon receipt, store it immediately at -20°C to avoid loss of activity and use it in 6 months.

### DECLARATION

THIS REAGENT IS FOR IN VITRO LABORATORY TESTING AND RESEARCH USE ONLY. DO NOT USE IT FOR CLINICAL DIAGNOSTICS. DO NOT USE OR INJECT IT IN HUMANS AND ANIMALS.

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