

Genorise® Recombinant Ovine IL-8 DataSheet

Catalog Number: GR104079

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. CXCL 8 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.

Related products

- 1. GR238016 50 ml Reagent Reservoir, 100/case, 5 packs/case (pack of 20)
- 2. GR238004 Tissue Culture 96-well Microplate, individually packed, Case of 50
- 3. GR238019 1.5 ml Microcentrifuge tube with screw cap and free-standing, pack of 500
- 4. GR238007 125 ml leak-resistant HDPE bottle, colorless, pack of 24
- 5. GR238002 Microplate 12x8-Well Strip High Binding, Case of 50
- 6. GR238003 Microplate 12x8-Well Strip Medium Binding, Case of 50
- 7. GR238032 42592 Costar Stripwell Microplate 1 x 8 Flat Bottom, High Binding, Case of 100
- 8. GR238001 468667 Thermo Microplate 12x8-Well Strip Nunc Maxixorp F8, Case of 60
- 9. GR238031 96-well microplate sealer plastic, pack of 100



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Description

<u>Size</u>: 2 μg

Accession #: NP_001009401.1

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 $0.2\text{-}0.4 \,\mu\text{g/ml}$.

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

<u>Purity</u>: > 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 μ g/ml in sterile PBS with 0.05% azide and store at -20°C \sim -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.

FOR LABORATORY RESEARCH USE ONLY NOT FOR USE IN HUMANS AND ANIMALS