

**DESCRIPTION**

**Source** *E. coli*-derived  
Thr39-Asn107  
Accession # P19876

**N-terminal Sequence Analysis** Thr39

**Predicted Molecular Mass** 8 kDa

**SPECIFICATIONS**

**SDS-PAGE** 7 kDa, reducing conditions

**Activity** Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2. The ED<sub>50</sub> for this effect is typically 0.4-2.4 ng/mL.

**Endotoxin Level** <0.10 EU per 1  $\mu$ g of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE with silver staining.

**Formulation** Lyophilized from a 0.2  $\mu$ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

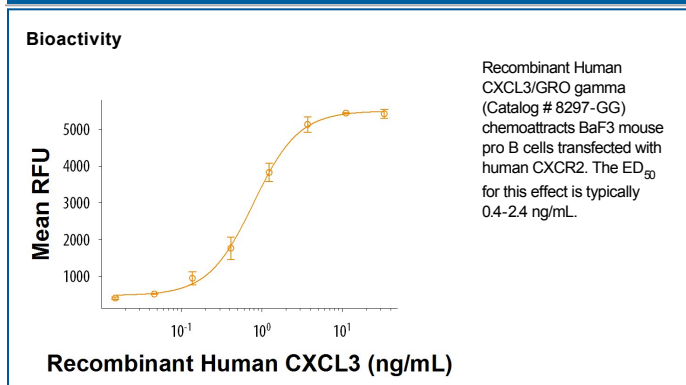
**Reconstitution** Reconstitute at 250  $\mu$ g/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**DATA**



**BACKGROUND**

CXCL3, also known as Growth-regulated Oncogene gamma (GRO gamma), Macrophage Inflammatory Protein 2 beta (MIP-2beta), Dendritic Cell Inflammatory Protein 1 (DCIP-1), or Cytokine-induced Neutrophil Attractant 2 (CINC-2), is an 8 kDa pro-inflammatory member of the CXC subfamily of heparin-binding chemokines (1-3). Mature human CXCL3 (aa 35-107) shares 70% and 74% amino acid (aa) sequence identity with mouse and rat CXCL3, respectively. CXCL3 binds and activates CXCR2 to induce chemoattraction of CXCR2-expressing cells including neutrophils and endothelial cells (4, 5). Additional N-terminal processing of mature CXCL3 by the removal of aa 35-38 increases its chemotactic activity by several fold (6). In addition to binding CXCR2, CXCL3 can also bind and be sequestered by the Duffy Antigen Receptor for Chemokines (DARC) decoy receptor (7).

**References:**

1. Tekamp-Olson, P. *et al.* (1990) *J. Exp. Med.* **172**:911.
2. Haskill, S. *et al.* (1990) *Proc. Natl. Acad. Sci. USA* **87**:7732.
3. Zlotnik, A. and O. Yoshie (2012) *Immunity* **36**:705.
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5. Mehrad, B. *et al.* (2007) *Thromb. Haemost.* **97**:755.
6. Wuyts, A. *et al.* (1999) *Eur. J. Biochem.* **260**:421.
7. Hansell, C.A. *et al.* (2011) *Immunol. Cell Biol.* **89**:197.