

DESCRIPTION

Source	<i>E. coli</i> -derived Ala35-Asn107 Accession # P19876
N-terminal Sequence Analysis	Ala35
Predicted Molecular Mass	8 kDa

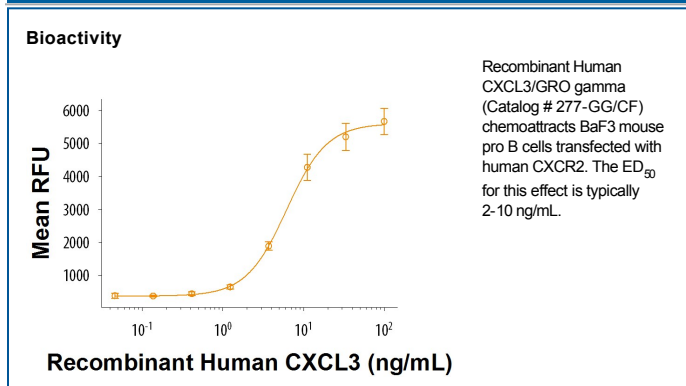
SPECIFICATIONS

Activity	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2. The ED ₅₀ for this effect is typically 2-10 ng/mL. Measured by its ability to induce myeloperoxidase release from cytochalasin B-treated human neutrophils. Schröder, J.M. <i>et al.</i> (1987) <i>J. Immunol.</i> 139 :3474. The ED ₅₀ for this effect is typically 0.1-0.3 μ g/mL.
Endotoxin Level	<0.01 EU per 1 μ g of the protein by the LAL method.
Purity	>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 μ m filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 μ 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. <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. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Human GRO α , GRO β (MIP-2 α), and GRO γ (MIP-2 β) are products of three distinct, non-allelic human genes. GRO β and GRO γ share 90% and 86% amino acid sequence homology, respectively, with GRO α . All three human GROs are members of the alpha (C-X-C) subfamily of chemokines and are thought to be the homologs of murine KC and MIP-2.

The three GRO cDNAs encode 107 amino acid precursor proteins from which the N-terminal 34 amino acid residues are cleaved to generate the mature GROs. There are no potential N-linked glycosylation sites in the amino acid sequences. GRO expression is inducible by serum or PDGF and/or by a variety of inflammatory mediators, such as IL-1 and TNF, in monocytes, fibroblasts, melanocytes and epithelial cells. In certain tumor cell lines, GRO is expressed constitutively.

Similar to other alpha chemokines, the three GRO proteins are potent neutrophil attractants and activators. In addition, these chemokines are also active toward basophils. All three GROs can bind with high affinity to the IL-8 receptor type B. It remains to be seen if a unique GRO receptor(s) also exist.