

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant GRO beta/CXCL2, Human

Catalog Number: BK0070-25µg

Source: Escherichia coli.

Quantity: 25µg

### Description:

Human GRO- $\alpha$ , GRO- $\beta$  (MIP-2 $\alpha$ ), and GRO- $\gamma$  (MIP-2 $\beta$ ) are products of three distinct, nonallelic human genes. GRO- $\beta$  and GRO- $\gamma$  share 90% and 86% amino acid sequence homology, respectively, with GRO $\alpha$ . All three isoforms of GRO are CXC chemokines that can signal through the CXCR1 or CXCR2 receptors. 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. Recombinant Human GRO beta/CXCL2 produced in E.coli is a single non-glycosylated polypeptide chain containing 74 amino acids. A fully biologically active molecule, rhGRO beta/CXCL2 has a molecular mass of 8.0 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

8.0 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

The EC<sub>50</sub> value of human GRO beta on Ca<sup>2+</sup> mobilization assay in CHO-K1/G $\alpha$ 15/hCXCR2 cells (human G $\alpha$ 15 and human CXCR2 stably expressed in

CHO-K1 cells) is less than 200 ng/ml.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

APLATELRCQCLQTLQGIHLKNIQSVKVK-  
SPGPHCAQTEVIATLKNQKACLNPASPMVK-  
KIEKMLKNGKSN

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant Human GRO beta/CXCL2 remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Human GRO beta/CXCL2 should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

### Usage:

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