

## Recombinant Human Growth Regulated Protein-beta (rh GRO-beta / CXCL2 / MIP-2a)

**Synonyms:** Melanoma Growth Stimulatory Activity (MGSA beta), Macrophage Inflammatory Protein-2alpha, chemokine (C-X-C motif) ligand 2, SCYB2, GRO2.

**Introduction:** All three isoforms of GRO are CXC chemokines that can signal through the CXCR1 or CXCR2 receptors. The GRO proteins chemoattract and activate neutrophils and basophils. GRO-beta is 90% identical in amino acid sequence as GRO-alpha. This chemokine is secreted by monocytes and macrophages and is chemotactic for polymorphonuclear leukocytes and hematopoietic stem cells. The gene for GRO-beta is located on human chromosome 4 in a cluster of other CXC chemokines.

**Description:** Recombinant human GRO-beta produced in E.Coli is a single, non-glycosylated polypeptide chain containing 73 amino acids and having a molecular mass of 7.9 kDa. rh GRO-beta is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from a 0.2µm filtered solution containing no additives. The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh GRO-beta in sterile H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh GRO-beta although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rh GRO-beta should be stored at 4° C between 2-7 days and for future use below -18°. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 98.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

**Amino acid sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Leu-Ala-Thr.

**Biological Activity:** Determined by its ability to chemoattract CXCR2 transfected 293 cells using 10-100 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11343712
<i>medium</i>	10 µg	Cat.N°	11343713

**ImmunoTools** Excellent Quality - Advantageously priced

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