

Recombinant Mouse Growth factor alpha (rm GRO-alpha / CXCL1 / KC)

Synonyms: Keratinocyte-derived Chemokine, Secretary protein N51, SCYB1, GRO-1

Introduction: The three isoforms of GRO – GROalpha, GRObeta and GROgamma - are structurally related to Interleukin-8 and belong to the CXC chemokines that can signal through the CXCR1 or CXCR2 receptors. The GRO proteins chemoattract and activate neutrophils and basophils. GROα / KC is expressed by macrophages, neutrophils and epithelial cells and has neutrophil chemoattractant activity. Murine GROα /KC also binds to human neutrophils. An initial study in mice showed evidence that GROα decreased the severity of multiple sclerosis and may offer a neuro-protective function.

Description: Recombinant murine GROα/KC produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 77 amino acids and having a molecular mass of 7.8 kDa. Rm GRO-α is purified by proprietary chromatographic techniques.

Source: *E. coli*.

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

Formulation: Lyophilized from a 0.22 µm filtered solution in 50 mM sodium acetate, 50 mM NaCl, pH 7.5
The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm GROα/KC in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm GROα/KC although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm GROα/KC should be stored at 4° C between 2-7 days and for future use below -18° C. 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 95.0% as determined by SDS-PAGE.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Amino acid Sequence: RLATGAPIANELRCQ CLQTMAGIHL KNIQSLKVLP SGPHCTQTEV IATLKNGREA
CLDPEAPLVQ KIVQKMLKGV PK

Biological Activity: testing in progress

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>	5 µg	Cat.N°	12343700
<i>medium</i>	20 µg	Cat.N°	12343704
<i>large</i>	100 µg	Cat.N°	12343706
<i>x-large</i>	500 µg	Cat.N°	12343707
<i>xx-large</i>	1000 µg	Cat.N°	12343708

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