

# Human GM-CSF R alpha Protein

Cat. No. GSF-HM1RA

## Description

<b>Source</b>	Recombinant Human GM-CSF R alpha Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu23-Gly320.
<b>Accession</b>	P15509-1
<b>Molecular Weight</b>	The protein has a predicted MW of 35.3 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

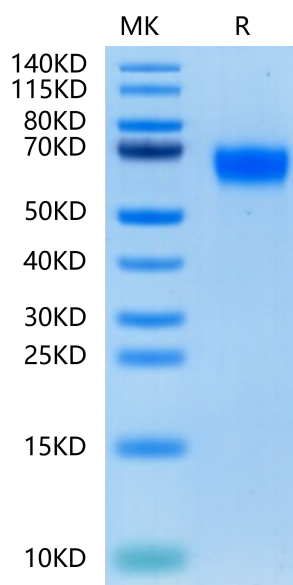
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

In the first trimester, the GM-CSF-R was found to be present on villous cytotrophoblast and all populations of extravillous trophoblast. Expression by villous syncytiotrophoblast was weak or absent, but this increased markedly by term. GM-CSF-R were also expressed by fetal Hofbauer cells within the mesenchyme of the chorionic villi and by uterine glandular epithelium and decidual macrophages within maternal decidua.

## Assay Data

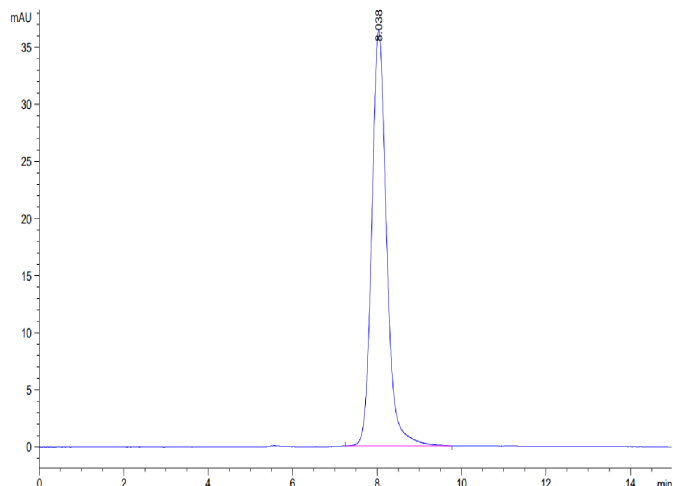
### Bis-Tris PAGE



Human GM-CSF R alpha on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

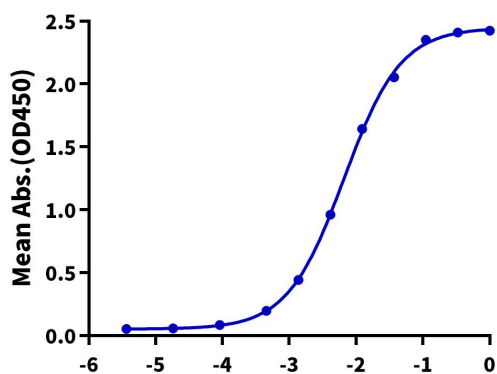


The purity of Human GM-CSF R alpha is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human GM-CSF R alpha, His Tag ELISA**

0.1µg Human GM-CSF R alpha, His Tag Per Well

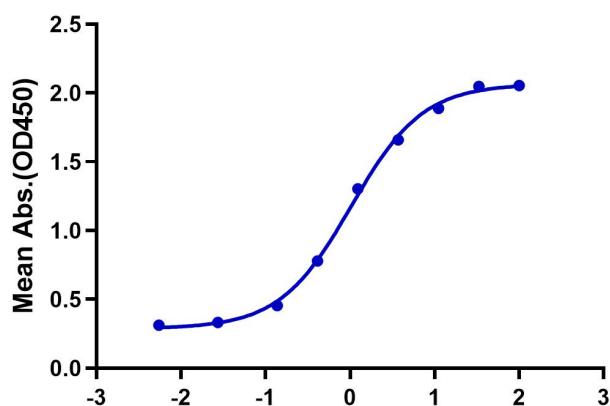


Immobilized Human GM-CSF R alpha, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-GM-CSF R alpha Antibody, hFc Tag with the EC50 of 6.6ng/ml determined by ELISA (QC Test).

Log Anti-GM-CSF R alpha Antibody, hFc Tag Conc.(µg/ml)

**Human GM-CSF R alpha, His Tag ELISA**

0.5µg Human GM-CSF, No Tag Per Well

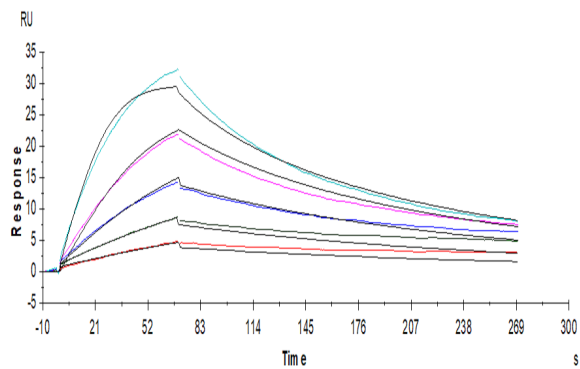


Immobilized Human GM-CSF, No Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human GM-CSF R alpha, His Tag with the EC50 of 1.0µg/ml determined by ELISA.

Log Human GM-CSF R alpha, His Tag Conc.(µg/ml)

SPR Data

Assay Data



Human GM-CSF R alpha , His Tag captured on CM5 Chip via anti-His antibody can bind Human GM-CSF, No Tag with an affinity constant of 0.79nM as determined in SPR assay (Biacore T200).