

# Human GM-CSF R alpha Protein

Cat. No. GSF-HM1RA



## Description

<b>Source</b>	Recombinant Human GM-CSF R alpha Protein is expressed from Expi293 with His tag at the C-terminal. 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 Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

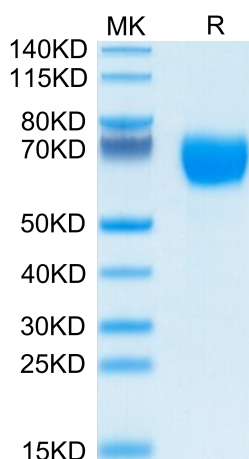
<b>Formulation</b>	Supplied as 0.22µm filtered solution in PBS (pH 7.4). Please dilute to the desired concentration according to the concentration of the solution shown on the product label.
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please do not repeated 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.

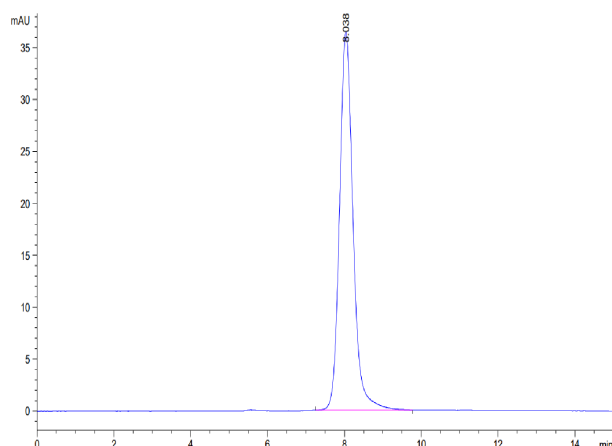
## Assay Data

### Tris-Bis PAGE



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

### SEC-HPLC

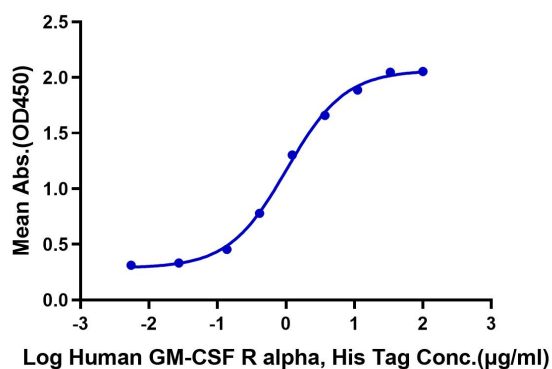


The purity of Human GM-CSF R alpha is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

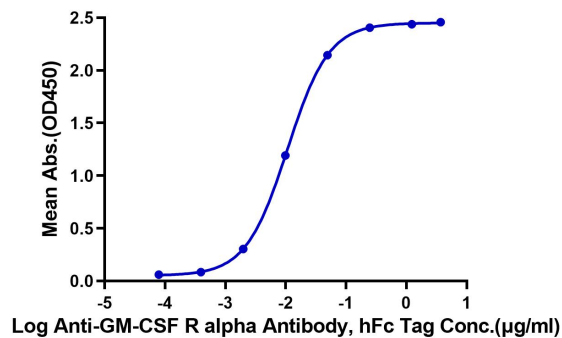
**Human GM-CSF R alpha, His Tag ELISA**  
0.5µg Human GM-CSF, No Tag Per Well



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.

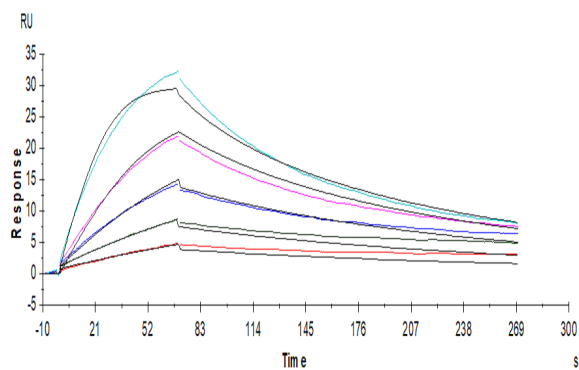
ELISA Data

**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 10.7ng/ml determined by ELISA.

SPR 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).