

## GFM22 Recombinant Mouse IL-13

### Description

Interleukin-13 (IL-13) is a cytokine secreted from type 2 T helper (Th2) cells. IL-13 has overlapping functions with interleukin-4 (IL-4), including the induction of immunoglobulin E (IgE) secretion from B cells, and the inhibition of interleukin-1  $\beta$  (IL-1  $\beta$ ), Tumor Necrosis Factor  $\alpha$  (TNF- $\alpha$ ), interleukin-8 (IL-8), and interleukin-6 (IL-6) inflammatory cytokine expression. IL-13 also regulates immune cell inflammation in response to the pathophysiological changes of surrounding non-immune cells. The IL-13 receptor consists of the IL-4Ra and IL-13Ra1 subunits. IL-13 can also bind the IL-13Ra2 receptor with high affinity. IL-13 functions are mediated through the JAK/STAT signaling pathway. Human and mouse IL-13 are cross-reactive.

<b>Length</b>	111 aa
<b>Molecular Weight</b>	12.3 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P20109
<b>Purity</b>	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

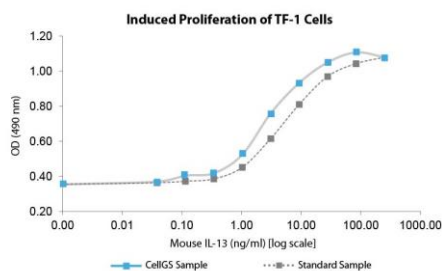
### Specifications

<b>Alternative Names</b>	Interleukin-13, interleukin 13, IL13, IL 13
<b>Biological Activity</b>	Mouse IL-13 is fully biologically active when compared to standard. The activity is determined by the ability to induce TF-1 cells proliferation and it is typically less than 10 ng/ml. This corresponds to an expected specific activity of $1 \times 10^5$ units/mg.
<b>Endotoxin Level</b>	$\leq 1.00$ EU/ $\mu$ g as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MPVRSVSLP LTLKELIEEL SNITQDQTPL CNGSMVWSVD LAAGGFCVAL DSLTNISNCN AIYRTQRILH GLCNRKAPTT VSSLPDTKIE VAHFITKLLS YTKQLFRHGP F

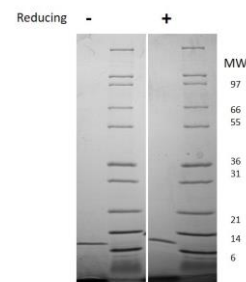
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 20 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ as supplied. 1 month when stored at $4^{\circ}\text{C}$ after reconstituting as directed. 3 months when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ after reconstituting as directed.

### Data



Induced proliferation of TF-1 cells for Mouse IL-13. Cell proliferation was measured to calculate the ED50, which is as expected less than 10 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Mouse IL-13 has a predicted Mw of 12.3 kDa.