

## Recombinant Mouse IL-13 (His, Flag)

## Information



16163
P20109
ALRHMGC116789; BHR1interleukin-13; IL13; IL-13; IL-13MGC116788; interleukin 13
HEK293
APGPVPRSVSLPLTLKELIEELSNITQDQTPLCNGSMVWSVDLAAGGFCVALDSLTNISNCNAIYRTQRILHG LCNRKAPTTVSSLPDTKIEVAHFITKLLSYTKQLFRHGPF
N-His, N-Flag
The protein has a calculated MW of 12.3 KDa.
Solution protein.
Avoid repeated freeze-thaw cycles. It is recommended that the protein be aliquoted for optimal storage2 years from date of receipt, -20 to -70 °C as supplied.
1 mg/mL
Supplied as a 0.2 µm filtered solution in PBS, pH7.4.
We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Fully biologically active as determined by a cell proliferation assay using TF-1 human erythroleukemic cells. The EC50 for this effect is 5.3 ng/mL.
Shipping with dry ice.
Centrifuge the vial prior to opening.
For Research Use Only! Not to be used in humans.

## **Quality Control**

Purity	> 95 % by SDS-PAGE.
Endotoxin	Less than 1.0 EU/μg as determined by LAL method.

## Description

Interleukin 13 (IL-13) is a 17 kDa immunomodulatory cytokine that plays a key role in the pathogenesis of allergic asthma and atopic diseases. It is secreted by CD4+ T cells of Th1 and Th2, NK cells, visceral smooth muscle cells, eosinophils, mast cells, and basophils. IL-13 cycles as a monomer with two internal disulfide bonds that form a bundled configuration of four α-helix. The amino acid sequence homology of mature mouse IL-13 with human, rat and rhesus angelese IL-13 was 57%, 75% and 58%, respectively. Despite its low homology, it exhibits cross-species activity between human, mouse, and rats. IL-13 has different activity against a variety of cell types. On macrophages, IL-13 inhibits the production of pro-inflammatory cytokines and other cytotoxic substances. On B cells, IL-13 induces the conversion of immunoglobulins to IgE, upregulates the expression of MHC class II, CD71, CD72, and CD23, and synergistically stimulates proliferation. IL-13 upregulates IL-6 and downregulates IL-1 and TNF-α in fibroblasts and endothelial cells.









