

# **Synonym**

IL4,BCGF1,BSF1

#### Source

Cynomolgus IL-4, Fc Tag(IL4-C5259) is expressed from human 293 cells (HEK293). It contains AA His 25 - Ser 153 (Accession # <u>P79339-1</u>). Predicted N-terminus: His 25

#### **Molecular Characterization**

IL-4(His 25 - Ser 153) Fc(Pro 100 - Lys 330) P79339-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 41.4 kDa. The protein migrates as 46-50 kDa and 53 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

# **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

# **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

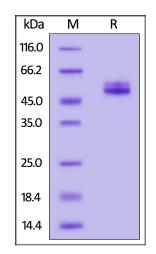
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

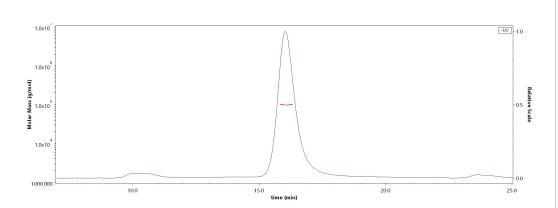
# **SDS-PAGE**



Cynomolgus IL-4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

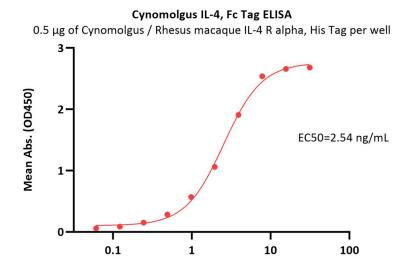
#### **SEC-MALS**



The purity of Cynomolgus IL-4, Fc Tag (Cat. No. IL4-C5259) is more than 90% and the molecular weight of this protein is around 85-115 kDa verified by SEC-MALS.

Report





Immobilized Cynomolgus / Rhesus macaque IL-4 R alpha, His Tag (Cat. No. ILR-C52H8) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Cynomolgus IL-4, Fc Tag (Cat. No. IL4-C5259) with a linear range of 0.1-4 ng/mL (QC tested).

Cynomolgus IL-4, Fc Tag Conc. (ng/mL)

# Background

Interleukin-4, is a cytokine that induces differentiation of naive helper T cells (Th0 cells to Th2 cells). In the presence of IL-4 and IL-13, cytokines that are produced in a Th-2 type response, particularly during allergy and parasitic infections, macrophages become differentially activated, And this cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. Recently, researcher found that the cytokine IL-4 plays a key role in development of innate CD8+ T cells in the thymus of several gene-deficient mouse strains, including Itk, KLF2, CBP and Id3, without previous exposure to antigen.

