Recombinant Rat IL-4 Protein

Catalog No.: RP01874

Sequence Information

Species
Rat

Gene ID
287287

Swiss Prot
P20096

Tags
C-His

Synonyms
B-cell growth factor 1; B-cell IGG differentiation factor; B-cell stimulatory factor 1; BSF-1; H-IL-4; IL-4; ILN; Interleukin; Interleukin-4; Interleukin4; Lymphocyte stimulatory factor 1; M-IL-4; MGC79402

Product Information

Source
HEK293 cells

Purification
≥ 95% as determined by SDS-PAGE.

Calculated MW
14.60 kDa

Observed MW
15-25 kDa

Endotoxin
< 0.01 EU/μg of the protein by LAL method

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Interleukin-4 (IL-4) is a pleiotropic, immune-modulatory cytokine produced by activated T cells, and serves as a ligand for interleukin 4 receptor. IL-4 has been found to have the broadest range of actions. 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 an important role in mediating the immune regulatory signal of IL-4. The IL-4 gene, IL-3, IL-5, IL-13, and CSF2 form a cytokine gene cluster on chromosome 5q. In particular, IL-4 is located in close proximity to IL13 on the chromosome. Further, the IL-4 gene, IL13 and IL5 are found to be coordinated by several long-range regulatory elements over a 120 kilobase range on the chromosome. IL-4 delta 2 is a known splice variant of IL-4.

Basic Information

Description
Recombinant Rat IL-4 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Cys25-Ser147) of Rat IL-4 (Accession #NP_958427.1) fused with a His at the C-terminus.

Activity
Measured in a cell proliferation assay using TF-1 Human erythroleukemic cells. The ED_{50} for this effect is 0.65-2.6 μg/mL, corresponding to a specific activity of 3.85×10^{2}~1.54×10^{3} units/mg.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

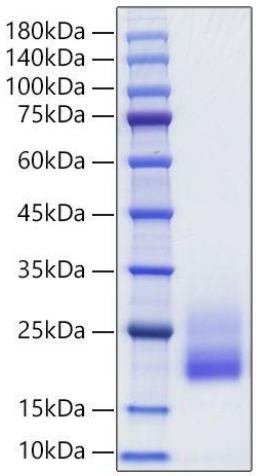
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

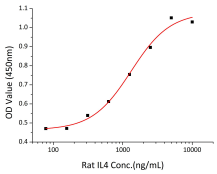
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Rat IL-4 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Rat IL-4 stimulates cell proliferation assay using TF-1 Human erythroleukemic cells. The ED_{50} for this effect is 0.65-2.6 μg/mL, corresponding to a specific activity of 3.85×10^{2}~1.54×10^{3} units/mg.