

Recombinant Mouse IL-4 Protein

Catalog No.: RP01161

Sequence Information

Species **Gene ID**
Mouse 16189

Swiss Prot **Tags**
P07750 C-His

Synonyms
IL-4, BSF-1, IL4

Product Information

Source **Purification**
HEK293 cells ≥ 95 % as
 determined by
 SDS-PAGE; ≥ 95
 % as determined
 by HPLC.

Calculated MW **Observed MW**
14.15 kDa 20 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL
method.

Formulation

Lyophilized from a 0.22 μm filtered
solution of PBS, pH 7.4. Contact us
for customized product form or
formulation.

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 stabilizer
(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, also known as IL4, is a secreted protein that belongs to the IL-4 / IL-13 family. Interleukin-4 / IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. It enhances both secretion and cell surface expression of IgE and IgG1. Interleukin-4 / IL4 also regulates the expression of the low-affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Interleukin-4 is essential for the switching of B cells to IgE antibody production and the maturation of T helper (Th) cells toward the Th2 phenotype.

Basic Information

Description

Recombinant Mouse IL-4 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (His23-Ser140) of mouse IL-4 (Accession #NP_067258.1) fused with a 6×His tag at the C-terminus.

Activity

1. Measured in a cell proliferation assay using MC/9 2 mouse mast cells. The ED₅₀ for this effect is 2.8–11.3 pg/mL, corresponding to a specific activity of 8.85×10⁷~3.57×10⁸ units/mg.
2. Measured in a cell proliferation assay using HT-2 mouse T cells. The ED₅₀ for this effect is 1.18–4.70 ng/mL, corresponding to a specific activity of 2.13×10⁵~8.51×10⁶ 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°C

Operational Notes

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

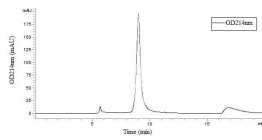
Contact

☎ | 400-999-6126

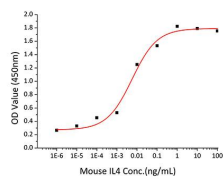
✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

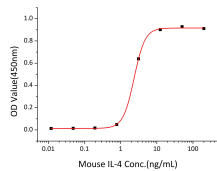
Validation Data



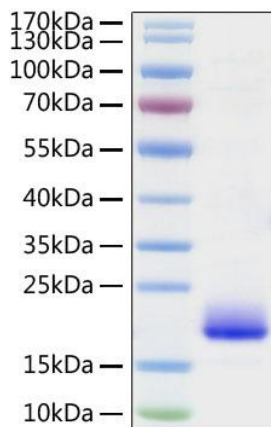
Recombinant Mouse IL-4 Protein is greater than 95% as determined by SEC-HPLC.



Recombinant Mouse IL-4 promote the proliferation of MC/9 2 mouse mast cells. The ED₅₀ for this effect is 2.8-11.3 pg/mL, corresponding to a specific activity of 8.85×10⁷ ~3.57×10⁸ units/mg.



Recombinant Mouse IL4 stimulates cell proliferation of HT-2 mouse T cells. The ED₅₀ for this effect is 1.18-4.70 ng/mL, corresponding to a specific activity of 2.13×10⁵~8.51×10⁶ units/mg.



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