

Datasheet for ABIN6700140

IL-4 Protein





Overview

Quantity:	5 μg
Target:	IL-4 (IL4)
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Mouse Interleukin-4 Recombinant Protein
Purification:	Interleukin-4 purity was determined to be greater than 95% as determined by HpLC and by reducing and non-reducing SDS-pAGE.
Purity:	95,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/μg protein.
Biological Activity Comment:	The activity is determined by dose-dependent induction of HT-2 cell proliferation and is typically less than 2 ng/mL.

Target Details

Target:	IL-4 (IL4)
Alternative Name:	II4 (IL4 Products)
Background:	Synonyms: B cell Stimulating Factor 1 (BSF-1), BCDF, BCGF, B-cell IgG differentiation factor, B-cell growth factor 1, IGG1 induction factor, Lymphocyte stimulatory factor 1
	Background: Interleukin-4 (IL-4) is an immuno-modulatory cytokine, produced primarily by a

Target Details

subgroup of helper T cells, known as Th2. IL-4 is known to induce naive helper T cells to differentiate to Th2 cells, which subsequently produce more IL-4. Th2 cells regulate a wide variety of other immune cells including, B cells, where it has the ability to promote IgG to IgE isotype switching. Recombinant mouse IL-4 is a non-glycosylated protein, containing 121 amino acids, with a molecular weight of 13.5 kDa.

UniProt:

P07750

Pathways:

JAK-STAT Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Proton Transport, Activated T Cell Proliferation

Application Details

Application Notes:	Other: User Optimized
	Application_Note: Interleukin-4 Recombinant Protein has been tested by biological activity and
	is suitable as a control for polyclonal or monoclonal anti-Interleukin-4 in immunological assays.
Comment:	Suggested_Applications: Cellular Assay
	Other_Performance_Data:

Restrictions:

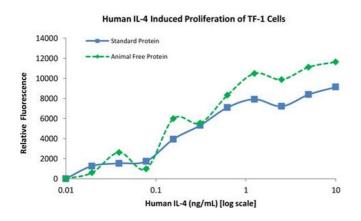
For Research Use only

Handling	
Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 5 μL (5-50 μL)
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date:

6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Mouse Interleukin-4 Recombinant Protein Bioactivity of Mouse Interleukin-4 Recombinant Protein. MC-9 cells were cultured with 0 to 2 ng/mL Mouse IL-4. Cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Mouse IL-4 is 0.016-0.046 ng/mL. This value is comparable to expected range of less than 0.2 ng/mL.