

GFC09AF Recombinant Canine IL-4 (Animal-Free)

Description

Interleukin 4 (IL-4) is an immunomodulatory cytokine that functions to induce naïve helper T cells to differentiate into type 2 T helper (Th2) cells. Th2 cells subsequently produce more IL-4 in a positive feedback loop. IL-4 also promotes immunoglobulin IgG to IgE isotype switching on B cells. IL-4 binds the IL-4R α receptor to activate STAT6 signaling.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	109 aa
Molecular weight	12.9 kDa
Source	<i>E. coli</i>
Accession number	O77762
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

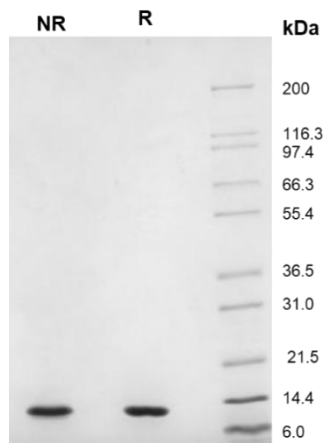
Specifications

Alternative names	B-cell stimulatory factor-1, BSF-1, BCDF, BCGF
Biological activity	Canine IL-4 is fully biologically active when compared to standard. The activity is determined by the dose-dependent proliferation of TF-1 cells, and it is typically less than 25 ng/ml.
Endotoxin level	≤0.1 EU/μg as measured by kinetic LAL (50% confidence)
Formulation	Lyophilized from a 0.2 μm filtered solution containing 0.1% Trifluoroacetic Acid (TFA)
AA sequence	MHNFNITIKE IIKMLNILTA RNDSCMELTV KDVFTAPKNT SDKEIFCRAA TVLRQIYTHN CSNRYLRGLY RNLSSMANKT CSMNEIKKST LKDFLERLKV IMQKKYYRH

Preparation and storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions. If a precipitate is observed, centrifuge the solution thoroughly and use only the soluble fraction (removing it from the precipitate). A 10% overfill has been added to compensate for any loss of protein in the precipitate.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



SDS-PAGE Showing a Single Prominent Band at 12.9 kDa

rc IL-4 (Animal free) (1 μ g) was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Instant Blue staining showing a single prominent band at 12.9 kDa