

## 32-6424: IL-4 Canine

**Application :** Functional Assay

**Alternative Name :** BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

IL4 is a pleiotropic cytokine produced by activated T cells. IL4 is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which contributes to various overlapping roles of this cytokine and IL13. STAT6, a signal transducer and activator of transcription plays a main role in mediating the immune regulatory signal of this cytokine. IL4, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. IL4, IL13 and IL5 are regulated co-ordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome.

Interleukin-4 Canine Recombinant produced in E. coli is a non-glycosylated monomer chain containing 109 amino acids and having a molecular mass of 12.9kDa. IL-4 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 50 µg / 100 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

The protein was lyophilized from a sterile (0.2µm) filtered solution containing 0.1% Trifluoroacetic Acid (TFA).

**Content :** It is recommended to reconstitute the lyophilized IL-4 in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized IL-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-4 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

**Amino Acid :** MHNFNITIKE IIKMLNILTA RNDSCMELTV KDVFTAPKNT SDKEIFCRAA TVLRQIYTHN CSNRYLRGLY RNLSSMANKT CSMNEIKKST LKDFLERLKV IMQKKYYRH.

### Application Note

The ED50, as determined by TF-1 cell proliferation is <25ng/ml corresponding to a specific activity which is  $\geq 4.0 \times 10^4$  units/mg.