

## Datasheet

### IL4 (Human) Recombinant Protein

**Catalog Number:** P5823

**Regulation Status:** For research use only (RUO)

**Product Description:** Human IL4 (130 a.a.) full-length recombinant protein with His tag expressed in Barley grain (*Hordeum vulgare*).

**Host:** Plants

**Theoretical MW (kDa):** 17.2

**Applications:** Func, SDS-PAGE, WB-Re  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Form:** Lyophilized

**Preparation Method:** Barley grain (*Hordeum vulgare*) expression system

**Purification:** Chromatography

**Concentration:** 100 ug/mL

**Purity:** > 95% by SDS-PAGE

**Endotoxin Level:** Endotoxin level is less than 0.005ng per ug protein (0.05EU/ug) as measured by turbidimetric kinetic assay

**Activity:** The bioactivity is determined by the cell proliferation assay for IL4 for dose-dependent cell proliferation of human TF-1 cells. The ED50 value for this effect is typically < 0.3 ng/mL, corresponding to a specific activity > 3.3 x 10e6 units/mg. Optimal concentration should be determined for specific applications and cell lines.

**Storage Buffer:** Lyophilized from PBS, pH7.2.

**Storage Instruction:** Store at -20°C on dry atmosphere. After reconstitution with sterile water to a concentration of no less than 100 ug/mL, store at -20°C. For long term

storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 3565

**Gene Symbol:** IL4

**Gene Alias:** BCGF-1, BCGF1, BSF1, IL-4, MGC79402

**Gene Summary:** The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. 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 a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq]