

# Mouse IL-11 Recombinant Protein

Catalog Number: 14-8110 Also known as: Interleukin-11, IL11 RUO: For Research Use Only. Not for use in diagnostic procedures.

## **Product Information**

Contents: Mouse IL-11 Recombinant Protein **REF** Catalog Number: 14-8110 Concentration: 0.1 mg/mL Handling Conditions: For best recovery. quick-spin vial prior to opening. Use in sterile envrioment. Source: E. coli expressed amino acids Pro22-Leu199 accession number NP 032376 Molecular Mass: 19.3 kDa Purity: > 97%, as determined by SDS-PAGE Endotoxin: Less than 0.1 ng/ug cytokine as determined by the LAL assay. Bioactivity: The bioactivity of this protein, as measured by T11 cell proliferation, is 1.7 ng/mL. This corresponds to a specific activity of 5.9 x 10e5 Units/mg.

**Formulation:** Sterile liquid: phosphate buffered saline, 1% BSA, pH 7.2. 0.22 um filtered. **Temperature Limitation:** Store at less than or equal to -70°C.

**Batch Code:** Refer to vial

Use By: Refer to vial

#### Description

IL-11 belongs to the IL-6 family of cytokines and is produced by various cell types, including epithelial cells, endothelial cells, keratinocytes, stromal cells, and neurons. It signals through a heterodimeric receptor consisting of a gp130 subunit shared by several other cytokines and an IL-11R $\alpha$  subunit unique to IL-11. IL-11 exhibits pleiotropic effects on various cell types. It acts synergistically with other growth factors such as IL-3, SCF, and IL-4 to promote the development of cells from several hematopoetic lineages and also plays a role in the regulation of osteoclast differentiation and maturation. IL-11 can protect against cell death and inhibit inflammation at sites of tissue injury, but has also been implicated in Th2-mediated sensitization and inflammation in asthma.

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### **Applications Reported**

Mouse IL-11 Recombinant Protein is biologically active.

### **Applications Tested**

The bioactivity of this protein, as measured by T11 cell proliferation, is 1.7 ng/ml. This corresponds to a specific activity of  $5.9 \times 10^5$  Units/mg.

### References

Du X, Williams DA. Interleukin-11: review of molecular, cell biology, and clinical use. Blood 1997 Jun 1: 89(11): 3897-908.

Lee CG, Hartl D, Matsuura H, Dunlop FM, Scotney PD, Fabri LJ, Nash AD, Chen NY, Tang CY, Chen Q, Homer RJ, Baca M, Elias JA. Endogenous IL-11 signaling in essential in Th2- and IL-13-induced inflammation and mucus production. Am J Respir Cell Mol Biol. 2008 Dec; 39(6): 739-46.

### **Related Products**

14-8119 Human IL-11 Recombinant Protein 51-1302 Anti-Mouse CD130 Alexa Fluor® 647 (To Be Discontinued. See replacement format: APC cat. 17-1302) (KGP130)