

**RECOMBINANT MOUSE INTERLEUKIN-5 (mIL-5)**

**Catalog # 02705**

**5 mg per vial**

**Catalog # 02905**

**25 mg per vial**

**PRODUCT DESCRIPTION:**

Interleukin 5 (IL-5) is a species-crossreactive cytokine produced by mast cells, T cells and eosinophils. It induces the proliferation, differentiation and activation of eosinophils. It is also a growth and differentiation factor for mouse B cells. IL-5 is an antiparallel disulphide-linked homodimer of molecular mass of approximately 45 kDa. Mature IL-5 monomers contain 113 amino acid residues and 3 glycosylation sites. IL-5 binds to a specific heterodimeric cell surface receptor formed by two subunits, the binding IL-5R $\alpha$  subunit and the non-binding  $\beta$  subunit, also shared by the receptors for IL-3 and GM-CSF, thus termed

$\beta$ -common ( $\beta$ c). Due to heterogeneous glycosylation, recombinant IL-5 resolves into multiple bands ranging from 32-34 kDa in SDS-PAGE.

**SOURCE:**

Produced in *Spodoptera frugiperda* 21 cells using a recombinant baculovirus expression vector containing a mouse IL-5 cDNA cloned from EL-4 T cells.

**PURITY:**

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1  $\mu$ g of the cytokine as determined by the LAL method.

**FORMULATION:**

Lyophilized from a sterile solution in PBS containing 50  $\mu$ g of bovine serum albumin per 1  $\mu$ g of cytokine.

**RECONSTITUTION:**

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 5  $\mu$ g/mL of the cytokine.

**STABILITY/STORAGE:**

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted mouse IL-5 can be stored under sterile conditions at 2°C - 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

**Avoid repeated freeze-thaw cycles.**

**ACTIVITY:**

Activity was determined in a cell proliferation assay using the factor-dependent human cell line, TF-1 and the ED<sub>50</sub> for this effect was typically 0.04 - 0.15 ng/mL.

**THIS REAGENT IS FOR RESEARCH USE ONLY.  
IT IS NOT TO BE ADMINISTERED TO HUMANS.**