

# **BACKGROUND:**

Interleukin 5 (IL-5) is a hematopoietic growth factor that is expressed in type 2 T helper (Th2) cells, mast cells, and eosinophils. IL-5 acts through the IL-5 receptor (IL-5R), stimulates B cell growth, and mediates eosinophil activation. Human and mouse IL-5 show cross-reactivity.

Recombinant human Interleukin 5 is a nonglycosylated protein dimer, containing 116/232 amino acids and having a molecular mass of 13.3/26.6 kDa.

#### Cat. No.: RP1191AF

#### **Alternate Names:**

B-cell differentiation factor I, Eosinophil differentiation factor, TFR

#### **AA Sequence:**

MIPTEIPTSA	LVKETLALLS	THRTLLIANE
TLRIPVPVHK	NHQLCTEEIF	QGIGTLESQT
VQGGTVERLF	KNLSLIKKYI	DGQKKKCGEE
RRRVNQFLDY	LQEFLGVMNT	EWIIES

# **TECHNICAL INFO**

# Source:

E. coli

# **Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

#### Formulation:

10 mM sodium glycinate, pH 8.5

#### Stability:

Lyophilized product is very stable at  $-20^{\circ}$ C. Reconstituted material should be aliquoted and frozen at  $-20^{\circ}$ C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term 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.

## **Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

## Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

## **Biological Activity:**

The activity is measured by dose-dependent T11 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 250 ng/mL.

# Animal Component-Free

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

