

TECHNICAL DATA SHEET

Recombinant Mouse IL-5 (Carrier-free)

Catalog Number: 21-8051

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Mouse IL-5 (Carrier-free)

DESCRIPTION

IL-5 is a hematopoietic growth factor that stimulates the proliferation and activation of eosinophils. Produced mainly by Th2 cells, IL-5 can also be produced by mast cells and activated eosinophils. IL-5 plays an important role in inducing cell-mediated immunity against parasitic infections and certain tumors. Elevated levels of IL-5 lead to Eosinophilia, which may result in the induction of asthma and other allergic diseases. Mouse IL-5 is cross-reactive with the human IL-5 receptor.

MOLECULAR MASS

Recombinant Mouse IL-5 is a 26.2 kDa homodimeric protein containing two 113 amino acid chains.

AMINO ACID SEQUENCE

MEIPMSTVVK ETLTQLSAHR ALLTSNETMR LPVPTHKNHQ LCIGEIQGL DILKNQTVRG GTVEMLFQNL SLIKKYIDRQ KEKCGEERRR
TRQFLDYLQE FLGVMSTEWA MEG

SOURCE

E. Coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Human

BIOACTIVITY

ED₅₀ <2.0 ng/ml, calculated as specific activity activity of >5 x 10⁵ units/mg determined by dose-dependent proliferation of human TF-1 cells.

RESEARCH AREAS

Immune System; Inflammation ; Proliferation; Wound Healing; Allergy

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Milburn MV, AM Hassell, MH Lambert, SR Jordan, AE Proudfoot, P Graber and TN Wells 1993 Nature 363: 172–176. Dubucquoi S, P Desreumaux, A Janin, O Klein, M Goldman, J Tavernier, A Capron and M Capron 1994 J Exp Med 179: 703-708. Bradding P, JA Roberts, KM Britten, S Montefort, R Djukanovic, R Mueller, CH Heusser, PH Howarth and ST Holgate 1994 Am J Respir Cell Mol Biol 10(5): 471–480. Shen HH, SI Ochkur, MP McGarry, JR Crosby, EM Hines, MT Borchers, H Wang, TL Biechelle, KR O'Neill, TL Ansay, DC Colbert, SA Cormier, JP Justice, NA Lee and JJ Lee 2003 J Immunol 170(6): 3296–32305. Sanderson CJ 1992 Blood 79: 3101–3109.

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