

TECHNICAL DATA SHEET

Recombinant Human IL-5 (Carrier-free)

Catalog Number: 21-8059

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-5 (Carrier-free)

DESCRIPTION

IL-5 is an interleukin produced by T helper-2 and mast cells. It is known to stimulate B cell growth and increase immunoglobulin secretion through binding to the IL-5 receptor. IL-5 is also known to be a cause of asthma and allergic rhinitis. IL-5 can stimulate growth and differentiation of eosinophils and activation and differentiation of eosinophilic granulocytes.

MOLECULAR MASS

Recombinant Human IL-5 is a 26.5 kDa protein composed of two 116 amino acid chains.

AMINO ACID SEQUENCE

MIPTIPTSA LVKETLALLS THRTLLIANE TLRIPVPVHK NHQLCTEEIF QGIGTLESQT VQGGTVERLF KNLSLIKYYI DGQKKKCGEE
RRRVNQFLDY LQEFLGVMNT EWIIES

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

Guinea Pig, Mouse

BIOACTIVITY

The ED₅₀ as determined by the dose-dependent proliferation of TF-1 cells was ≤0.15 ng/ml, corresponding to a specific activity of ≥6.6 x 10⁶ units/mg.

RESEARCH AREAS

Immune System; Inflammation; Proliferation; Wound Healing; Allergy

RECONSTITUTION

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

REFERENCES

Dubucquoi S, Desreumaux P, Janin A, Klein O, Goldman M, Tavernier J, Capron A, Capron M (February 1994). "Interleukin 5 synthesis by eosinophils: association with granules and immunoglobulin-dependent secretion". J. Exp. Med. 179 (2): 703–8. Bradding P, Roberts JA, Britten KM, Montefort S, Djukanovic R, Mueller R, Heusser CH, Howarth PH, Holgate ST (May 1994). "Interleukin-4, -5, and -6 and tumor necrosis factor-α in normal and asthmatic airways: evidence for the human mast cell as a source of these cytokines". Am. J. Respir. Cell Mol. Biol. 10 (5): 471–80. Shen HH, Ochkur SI, McGarry MP, Crosby JR, Hines EM, Borchers MT, Wang H, Biechelle TL, O'Neill KR, Ansay TL, Colbert DC, Cormier SA, Justice JP, Lee NA, Lee JJ (March 2003). "A causative relationship exists between eosinophils and the development of allergic pulmonary pathologies in the mouse". J. Immunol. 170 (6): 3296–305.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.