

TECHNICAL DATA SHEET

Recombinant Human IL-35 (Carrier-free)

Catalog Number: 21-7154

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-35 (Carrier-free)

DESCRIPTION

IL-35 belongs to the IL-12 cytokine family. It is a glycosylated, heterodimeric protein that consists of IL-12A (IL-12 p35) and IL-27B (EBI3) subunits. Produced by activated regulatory T cells in humans, it is a key player in immune suppression. Recent studies suggest that IL-35 may be used to induce B regulatory cells. Over-expression of IL-35 has been shown to suppress cancer cell growth in vitro, and may play a role in mediating apoptosis.

MOLECULAR MASS

Recombinant Human IL-35 has a molecular weight of 45.8 kDa, consisting of 406 amino acids.

AMINO ACID SEQUENCE

α Subunit: RNLPVATPDP GMFPCLHHSQ NLLRAVSNML QKARQTLEFY PCTSEEIDHE DITKDKTSTV EACLPLELTK NESCLNSRET SFITNGSCLA SRKTSFMMAL CLSSIEDLK MYQVEFKTMN AKLLMDPKRQ IFLDQNMLAV IDELMQALNF NSETVPQKSS LEEPDFYKTK IKLCILLHAF RIRAVTIDRV MSYLNAS

β Subunit: RKGPPAALTL PRVQCRASRY PIAVDCSWTL PPAPNSTSPV SFIATYRLGM AARGHSWPCL QQTPTSTSTCT ITDVQLFSMA PYVLNVTAVH PWGSSSSFFVP FITEHIIKPD PPEGVRLSPL AERQLQVQWE PPGSWPFPEI FSLKYWIRYK RQGAARFHRV GPIEATSFIL RAVRPRARYY VQVAAQDLTD YGELSDWSLP ATATMSLGK

SOURCE

HEK293 cells

APPLICATIONS

Bioassay

PURITY

90 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

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

BIOACTIVITY

The ability to suppress PBMC proliferation is measured.

RESEARCH AREAS

Inflammation, Immune System, Differentiation, Proliferation, Stem Cells

RECONSTITUTION

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

REFERENCES

Long J, Zhang X, Wen M, Kong Q, Lv Z, An Y and Wei XQ. 2013. Biochem Biophys Res Commun. 430(1): 364-369
 Collison LW, Workman CJ, Kuo TT, Boyd K, Wang Y, Vignali KM, Cross R, Sehy D, Blumberg RS and Vignali DA. 2007. Nature. 450(7169): 566-569.
 Niedbala W, Wei X, Cai B, Hueber AJ, Leung BP, McInnes IB and Liew FY. 2007. Eur. J.Immunol. 37(11): 3021-3029.
 Collison LW, Delgoffe GM, Guy CS, Vignali KM, Chaturvedi V, Fairweather D, Satoskar AR, Garcia KC, Hunter CA, Drake CG, Murray PG and Vignali DA. 2012. Nat Immunol. 13(3): 290-299.
 wang RX, Yu CR, Dambuza IM, Mahdi RM, Dolinska MB, Sergeev YV, Wingfield PT, Kim SH and Egwuagu CE. 2014. Nat Med. 20(6): 633-641.

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.