

TECHNICAL DATA SHEET

Recombinant Human sCD23 (FceRII) (Carrier-free)

Catalog Number: 21-7141

RPx-Pro[™] Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human sCD23 (FceRII) (Carrier-free)

DESCRIPTION

CD23, also known as Fc epsilon RII (FceRII), is a low affinity receptor for IgE and belongs to the C-type lectin superfamily. It is expressed on mature B cells, activated macrophages, eosinophils, follicular dendritic cells, and platelets. Soluble CD23 is generated through cysteine-protease or metalloprotease activity. A long (a) form is expressed consitutively on B cells, while a short (b) form is upregulated by IL-4 during allergic inflammation. Fragments of different sizes are generated and function may be related to fragment size, as well as form. CD23 plays a role IgE regulation, isotype switching, B cell homeostasis and stimulating monocytes to release pro-inflammatory cytokines.

ENDOTOXIN LEVEL

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

MOLECULAR MASS

Recombinant Human sCD23 consists of 172 amino-acids. This results in a 19.2 kDa non-glycosylated protein.

AMINO ACID SEQUENCE

MELQVSSGFV CNTCPEKWIN FQRKCYYFGK GTKQWVHARY ACDDMEGQLV SIHSPEEQDF LTKHASHTGS WIGLRNLDLK GEFIWVDGSH VDYSNWAPGE PTSRSQGEDC VMMRGSGRWN DAFCDRKLGA WVCDRLATCT PPASEGSAES MGPDSRPDPD GRLPTPSAPL HS

SOURCE **APPLICATIONS PURITY STORAGE** 96 % E. coli Bioassay -20°C

PROTEIN CONTENT

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

AUTHENTICITY

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

CROSS REACTIVITY

BIOACTIVITY

The ability to induce TNF-alpha production in human PBMCs is measured.

RESEARCH AREAS

Inflammation, Immune System, Receptors

RECONSTITUTION

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

REFERENCES

König W, Pfeil P, Hofmann U, Bujanowski-Weber J and Knöller I. 1988. Allergol Immunopathol (Madr). 16(4): 203-208. Yodoi J, Hosoda M, Maeda Y, Sato S, Takami M and Kawabe T. 1989. Ciba Found Symp. 147: 133-48. Prinz JC, Baur X, Mazur G and Rieber EP. 1990. Eur J Immunol. 20(6): 1259-1264. Alderson MR, Armitage RJ, Tough TW and Ziegler SF. 1994. Cytokine. 6(4): 407-413. Cooper AM, Hobson PS, Jutton MR, Kao MW, Drung B, Schmidt B, Fear DJ. Beavil AJ, McDonnell Jm, Sutton BJ and Gould HJ. 2012. J Immunol. 188(7): 3199-3207. Rezzonico R, Imbert V, Chicheportiche R and Dayer JM. 2001. Blood. 97(10): 2932-2940.

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.