

TECHNICAL DATA SHEET

Recombinant Human C5a (Carrier-free)

Catalog Number: 21-7139

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human C5a (Carrier-free)

DESCRIPTION

C5a and C5b are active products of C5 cleavage by C5 convertase. C5a belongs to the anaphylatoxin family and is the most potent among other anaphylatoxins. It triggers degranulation of endothelial cells, mast cells and phagocytes which then produce a local inflammatory response. It can induce the synthesis and release of IL-8 from monocytes. C5a increases vascular permeability which allows easy migration of neutrophils from blood vessels to tissue. It is a heavily glycosylated protein and is known for its chemotactic activity.

MOLECULAR MASS

Recombinant Human C5a contains 74 amino acids, resulting in a 8.28 kDa glycoprotein.

AMINO ACID SEQUENCE

TLQKKIEEIA AKYKHSVVKK CCYDGACVNN DETCEQRAAR ISLGPRCIKA FTECCVVASQ LRANISHKDM QLGR

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

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

A range of 1.0-10.0 ng/ml is used to determine its ability to chemoattract human monocytes.

RESEARCH AREAS

Apoptosis, Angiogenesis & Cardiovascular, Inflammation, Immune System, Chemotaxis

RECONSTITUTION

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

REFERENCES

Manthey HD, Woodruff TM, Taylor SM and Monk PN. 2009. Int J Biochem Cell Biol. 41(11): 2114–2117. Gennaro R, Simonic T, Negri A, Mottola C, Secchi C, Ronchi S and Romeo D. 1986. Eur J Biochem. 155(1): 77–86. Guo RF, Ward PA. 2005. Annu Rev Immunol. 23: 821-852. Ember JA, Sanderson SD, Hugli TE and Morgan EL. 1994. Am J Pathol. 144(2): 393-403.

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.