

**TECHNICAL DATA SHEET**

**Recombinant Human IGF Binding Protein-3 (Carrier-Free)**

Catalog Number: 21-9002

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human IGF Binding Protein-3 (Carrier-Free)

**DESCRIPTION**

IGF-BP3 is a 30 kDa, cysteine-rich secreted protein. It is the major IGF binding protein present in the plasma of human and animals, and it is also found in alpha-granules of platelets. In addition to its ability to modulate the activity of IGF-I and IGF-II, IGF-BP3 exerts inhibitory effects on follicle stimulating hormone (FSH) activity. Decreased plasma levels of IGF-BP3 often results in dwarfism, whereas elevated levels of IGF-BP3 may lead to acromegaly.

**MOLECULAR MASS**

Recombinant Human IGF-BP3 is a 28.8 kDa protein consisting of 264 amino acid residues.

**AMINO ACID SEQUENCE**

GASSGGLGPV VRCEPCDARA LAQCAPPAV CAELVREPGC GCCLTCALSE GQPCGIYTER CGSGLRCQPS PDEARPLQAL LDGRGLCVNA  
 SAVSRLRAYL LPAPPAPGNA SESEEDRSAG EVESPSVSST HRVSDPKFHP LHSKIIIIKK GHAKDSQRYK VDYESQSTDT QNFSSSESKRE TEYGPCRREM  
 EDTLNHLKFL NVLSPRGVHI PNCDKKGFKYK KKQCRPSKGR KRGFCWCVDK YGQPLPGYTT KGKEDVHCYS MQSK

**SOURCE**

E.coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

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

**ENDOTOXIN LEVEL**

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

**AUTHENTICITY**

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

**CROSS REACTIVITY**

Human

**BIOACTIVITY**

The ED50 was determined by its ability to inhibit IGF-II induced proliferation of MCF-7. The expected ED50 for this effect is ≤ 0.2 µg/ml in presence of 15 ng/ml of human IGF-II

**RESEARCH AREAS**

Proliferation, Cancer, Apoptosis, Diabetes/Weight Regulation

**RECONSTITUTION**

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

**REFERENCES**

Francischetti, I M. Cyr61/CCN1 displays high-affinity binding to the somatomedin B(1-44) domain of vitronectin. 2010.PLoS ONE; 5(2):e9356. Martino, M M. Heparin-binding domain of fibrin(ogen) binds growth factors and promotes tissue repair when incorporated within a synthetic matrix. 2013. Proceedings of the National Academy of Sciences of the USA; 110(12):4563-8

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.