

TECHNICAL DATA SHEET

Recombinant Human IGF-BP6 (Carrier-free)

Catalog Number: 21-7067

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human IGF-BP6 (Carrier-free)

DESCRIPTION

Insulin-like growth factor binding proteins (IGF-BPs) are a family of secreted proteins with conserved amino- and carboxy-terminal sequences and variable mid-regions. IGF-BPs control the distribution, function and activity of IGFs in various cell tissues and body fluids. IGF-BP6 is found in serum, ovary, prostate, fibroblasts and cerebral spinal fluid, and has a preference for binding IGF II over IGF I. IGF-BP6 also has IGF-independent effects, including inhibition of angiogenesis and promotion of cancer cell migration.

MOLECULAR MASS

Recombinant human IGF-BP6 has a calculated mass of 22.6 kDa and consists of 213 amino acid residues including the IGF-BP domain and thyroglobulin type-I domain. IGF-BP6 migrates at an apparent molecular weight of approximately 23.0-30.0 kDa by SDS-PAGE analysis under non-reducing conditions.

AMINO ACID SEQUENCE

RCPGCGQGVQ AGCPGGCVVEE EDGGSPAEGC AEAEGCLRREG QCEGVYTPNCA PGLQCHPPKDD EAPLRALLLG RGRCLPARAP
 AVAAENPKES KPQAGTARPO DVNRRDQQRN PGTSTTPSQP NSAGVQDTEM GPCRRHLDSV LQLLQTEVYR GAQTLVYPNC
 DHRGFYRKRQ CRSSQGQRRG PCWCVDRMGK SLPGSPDNGS SSCPTGSSG

SOURCE

(BTI-Tn-5B1-4) Hi-5 Insect cells*

APPLICATIONS

Bioassay

PURITY

95 %

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

BIOACTIVITY

Determined by its ability to inhibit IGF-II induced proliferation of human MCF-7 cells. The expected ED₅₀ for this effect is 0.1 - 0.4 μg/ml.

RESEARCH AREAS

Apoptosis; Cancer; Diabetes / Weight Regulation; Proliferation

RECONSTITUTION

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

REFERENCES

Ferry RJ Jr, Cerri RW and Cohen P. 1999. Horm Res. 51(2): 53-67. Jones JI and Clemmons DR. 1995. Endocr Rev. 16(1): 3-34. Kelley KM, Oh Y, Gargosky SE, Gucev Z, Matsumoto T, Hwa V, Ng L, Simpson DM and Rosenfeld RG. 1996. Int J Biochem Cell Biol. 28(6): 619-637. Back LA, Fu P and Yang Z. 2013. Clin Sci (Lond). 124(4): 215-229.

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