TECHNICAL DATA SHEET

Equivalent Performance, Exceptional Value

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. IGFBP-6 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 AGCPGGCVEE EDGGSPAEGC AEAEGCLRREG QECGVYTPNCA PGLQCHPPKDD EAPLRALLLG RGRCLPARAP AVAEENPKES KPQAGTARPQ DVNRRDQQRN PGTSTTPSQP NSAGVQDTEM GPCRRHLDSV LQQLQTEVYR GAQTLYVPNC DHRGFYRKRQ CRSSQGQRRG PCWCVDRMGK SLPGSPDGNGS SSCPTGSSG

SOURCE	APPLICATIONS	PURITY	STORAGE
(BTI-Tn-5B1-4) Hi-5 Insect cells*	Bioassay	95 %	-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 ED_{50} 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.