

TECHNICAL DATA SHEET

Recombinant Human TGF- β 1 (Carrier-free)

Catalog Number: 21-8369

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human TGF- β 1 (Carrier-free)

DESCRIPTION

Transforming growth factor beta1, TGF- β 1, belongs to the transforming growth factor beta superfamily of cytokines. TGF- β 1 performs several functions including control of cell growth, proliferation, differentiation and apoptosis in addition to synthesis and deposition of the extracellular matrix. TGF- β 1 plays a key role in embryogenesis and wound healing.

MOLECULAR MASS

Recombinant Human TGF- β 1 is a 25.0 kDa protein with each subunit composed of 112 amino acid residues.

AMINO ACID SEQUENCE

ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP
QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS

SOURCE

HEK293 cells

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

Chicken, Cow, Dog, Frog, Monkey, Mouse, Pig, Rabbit, Rat

BIOACTIVITY

The ED₅₀ was determined by TGF- β 1's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is \leq 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.

RESEARCH AREAS

Angiogenesis/Cardiovascular; Apoptosis; Cancer; Immune System; Inflammation; Proliferation; Stem Cells & Differentiation;
TGF- β Superfamily: Wound Healing: Allerg

RECONSTITUTION

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

REFERENCES

Derynck R, Jarrett J, Chen E, Eaton D, Bell J, Assoian R, Roberts A, Sporn M and Goeddel D 1985 Nature 316(6030): 701–5. Assoian R, Komoriya A, Meyers C, Miller D and Sporn M 1983 J Biol Chem 258(11): 7155–60. Letterio J and Roberts A 1998 Annu Rev Immunol 16: 137–61. Wahl S, Hunt D, Wong H, Dougherty S, McCartney-Francis N, Wahl L, Ellingsworth L, Schmidt J, Hall G and Roberts A 1988 J Immunol 140(9): 3026–32.

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