

**TECHNICAL DATA SHEET**

# Recombinant Human TGF- $\beta$ 3 (Carrier-free)

Catalog Number: 21-8370

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

**CONTENTS**

Recombinant Human TGF- $\beta$ 3 (Carrier-free)

**DESCRIPTION**

TGF- $\beta$ 3 is a member of the TGF family of cytokines. TGF  $\beta$ 3 is secreted as a precursor protein that is cleaved to produce an N-terminal latency-associated (LAP) peptide and a C-terminal mature TGF- $\beta$  that contains the biological activity of the cytokine. TGF- $\beta$ 3 is involved in embryogenesis and cell differentiation.

**MOLECULAR MASS**

Recombinant Human TGF- $\beta$ 3 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

**AMINO ACID SEQUENCE**

ALDTNYCFRN LEENCCVRPL YIDFRQDLGW KVVHEPKGY ANFCSGPCPY LRSADTTTST VLGLYNTLNP EASASPCV  
QDLEPLTILY YVGRTPKVEQ LSNMVKSK CS

**SOURCE**

E. Coli

**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/ $\mu$ g of protein (<1 EU/ $\mu$ g).

**AUTHENTICITY**

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

**CROSS REACTIVITY**

Cow, Dog, Mouse, Pig, Rat

**BIOACTIVITY**

The ED<sub>50</sub> was determined by TGF- $\beta$ 3'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 x 10<sup>7</sup> units/mg.

**RESEARCH AREAS**

Angiogenesis/Cardiovascular; Apoptosis; Cancer; Immune System; Inflammation; Proliferation; Stem Cells & Differentiation; TGF- $\beta$  Superfamily; Wound Healing

**RECONSTITUTION**

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

**REFERENCES**

Miyazono K, U Hellman, C Wernstedt and CH Heldin 1988 J Biol Chem 263(13): 6407-6415. Derynck R, PB Lindquist, A Lee, D Wen, J Tamm, JL Graycar, L Rhee, AJ Mason, DA Miller, RJ Coffey, et al 1988 EMBO J 7(12): 3737-3743. Sporn MB 2006 Cytokine Growth Factor Rev 17(1-2): 3-7.

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