

TECHNICAL DATA SHEET

Recombinant Human/Mouse/Rat Activin A (Carrier-free)

Catalog Number: 21-8993

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human/Mouse/Rat Activin A (Carrier-free)

DESCRIPTION

Activin A is a TGF-beta family member that exert a wide array of biological activities including regulation of cell proliferation and differentiation, apoptosis and metabolism. Activin A is one of four beta-subunit proteins that exist as homodimers or heterodimers of the beta-subunit isoforms. Activin protein complexes are closely related to inhibins, which consist of a beta-subunit paired with an alpha-subunit. Activins and inhibins are expressed by various cell types and mediate opposing biological effects. Human/Mouse/Rat Activin A is a disulfide-linked homodimer consisting of two betaA chains.

MOLECULAR MASS

Human/murine/Rat Activin A is a 26.0 kDa disulfide-linked homodimer of two beta-A chains, each containing 116 amino acid residues.

AMINO ACID SEQUENCE

GLECDGKVN I CCKKQFFVSF KDIGWNDWII APSGYHANYC EGECPSHIAG TSGSSLSFH S TVINH YMRG HSPFANLKSC
CVPTKLRPMS MLYYDDGQNI IKKDIQNMIV EECGCS

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

97 %

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

Chicken, Dog, Frog, Mouse, Human + Mouse

BIOACTIVITY

The ED₅₀ as determined by its ability to inhibit the proliferation of murine MPC-11 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 10⁵ units/mg.

RESEARCH AREAS

Angiogenesis/Cardiovascular; Apoptosis; Cancer; Neurobiology; Stem Cells & Differentiation; TGF-beta Superfamily

RECONSTITUTION

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

REFERENCES

Shav-Tal Y and Zipori D. 2002. Stem Cells. 20: 493. Yu J, Dolter KE. 1997. Cytokines Cell Mol Ther. 3(3): 169-77. Chen YG, Wang Q, Lin SL, Chang CD, Chuang J, Ying SY. 2006. Exp Biol Med. 231(5): 534-44. Aleman-Muench GR, Soldevila G. Immunol Cell Biol. 2012. 90(2): 137-48.

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