



Activin A Recombinant Protein

CATALOG NUMBER: 40-212

Specifications	
SPECIES:	Human
SOURCE SPECIES:	(BTI-Tn-5B1-4) High-5 Insect cells
SEQUENCE:	GLECDGKVN I CCKKQFFVSF KDIGWNDWII APSGYHANYC EGECPSHIAG TSGSSLSFHS TVINHYRMRG HSPFANLKSC CVPTKLRPMS MLYYDDGQNI IKKDIQNMIV EECGCS
TESTED APPLICATIONS:	
BIOLOGICAL ACTIVITY:	The ED50 was determined by its ability to inhibit the proliferation of murine MPC - 11 cells is ≤ 2 ng/mL, corresponding to a specific activity of $\geq 5 \times 10^5$ units/mg.

Properties	
PURITY:	Greater than 95% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per ug (1EU/ug).
PHYSICAL STATE:	Lyophilized
STORAGE CONDITIONS:	The lyophilized Activin A recombinant protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted Activin A is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. As with any protein, exposing Activin A recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

Additional Info	
ALTERNATE NAMES:	JV18, MADH2, MADR2, JV18-1, hMAD-2, hSMAD2, Mothers against decapentaplegic homolog 2, MAD homolog 2
ACCESSION NO.:	NP_001003652.1
PROTEIN GI NO.:	51173730

Background

Activin A is a TGF- β family member that exhibits a wide range of biological activities including regulation of cellular proliferation and differentiation, and promotion of neuronal survival. Elevated levels of Activin A in human colorectal tumors and in post-menopausal woman have been implicated in colorectal and breast cancers, respectively. The biological activities of Activin A can be neutralized by inhibins and by the diffusible TGF- β antagonist, Follistatin. Human Activin A is a 26.0 kDa disulfide-linked homodimer of two β A chains, each containing 116 amino acid residues.

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