



## Recombinant Human Activin-A

20180427BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-012S</b>
Size:	2 µg
Lot. No.:	According to product label

### Scientific Background

<b>Gene-ID (NCBI):</b>	3624
<b>Synonyms:</b>	Inhibin beta-1, FRP, FSH (Follicle-stimulating hormone)-releasing protein

Activin A is a TGF-beta 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-beta antagonist, Follistatin. Human Activin A is a 26 kDa disulfide-linked homodimer of two beta A chains, each containing 116 amino acid residues.

### Sequence

GLECDGKVNICCKKQFFVSKFDIGWNDWI IAPSGYHANYCEGECPSHIAGTS  
GSSLSFHSTVINHYMRGHSPFANLKSCCVPTKLRPMSMLYYDDGQNI IKKD  
IQNMIVEECGCS

### Database References

<b>Protein RefSeq:</b>	NP_002183.1
<b>Uniprot ID:</b>	P08476
<b>mRNA RefSeq:</b>	NM_002192.2

### Product Specifications

<b>Expressed in</b>	CHO cells
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng/µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	116
<b>MW:</b>	26 kDa



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Determined by its ability to inhibit the proliferation of mouse MPC-11 cells. The expected ED<sub>50</sub> is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 10<sup>5</sup> units/mg.