

## 32-1002: Activin A Plant-Active Recombinant Protein

**Alternative Name :** Inhba, Inhibin beta A, FSH releasing protein.

### Description

Source : *Nicotiana benthamiana*. Active form Activin-A Human Recombinant produced in Plant is a homodimeric, glycosylated, polypeptide chain containing 2 x 116 amino acids and having a molecular weight of 27.4kDa. The Active form Activin-A is fused to a 6-His tag at N-terminus and purified by standard chromatographic techniques. Activins are homodimers or heterodimers of the different Beta subunit isoforms, part of the TGF Beta family. Mature Activin A has two 116 amino acids residues BetaA subunits (BetaA- BetaA). Activin displays an extensive variety of biological activities, including mesoderm induction, neural cell differentiation, bone remodelling, haematopoiesis, and reproductive physiology. Activins takes part in the production and regulation of hormones such as FSH, LH, GnRH and ACTH. Cells that are identified to express Activin A include fibroblasts, endothelial cells, hepatocytes, vascular smooth muscle cells, macrophages, keratinocytes, osteoclasts, bone marrow monocytes, prostatic epithelium, neurons, chondrocytes, osteoblasts, Leydig cells, Sertoli cells, and ovarian granulosa cells.

### Product Info

<b>Amount :</b>	5 µg
<b>Purification :</b>	Greater than 98% as observed by SDS-PAGE.
<b>Content :</b>	Active form Activin-A was lyophilized from a concentrated 1mg/ml protein solution containing 50mM Tris-HCl pH-7.4
<b>Storage condition :</b>	For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Repeated freezing and thawing is not recommended.
<b>Amino Acid :</b>	HHHHHHGLECDGKVNICKCKKQFFVSFKDIGWNDWIIAPSGYHANYCEGECPSHIAGTSGSSLSFHS TVINHYRMRGHSPFANLKSCCVPTKLRPMSMLYDDGQNIKKDIQNMIVEECGCS.

### Application Note

INHBA protein should be reconstituted in distilled water to a concentration of 50 ug /ml. Due to the protein nature, dimers and multimers may be observed. The biological activity of INHBA is measured by its ability to inhibit mouse plasmacytoma cell line (MPC-11) cells proliferation ([<sup>3</sup>H]thymidine incorporation). ED50<5ng/ml.

