

Activin-A, Active, His Tag, human recombinant

Catalog No: 97383 Lot No: XXXXX

Source: Nicotiana benthamiana

Synonyms: Inhba, Inhibin beta A, FSH releasing protein

Background

Activins are homodimers or heterodimers of the different ß subunit isoforms, part of the TGFß family. Mature Activin A has two 116 amino acids residues ßA subunits (ßA-ßA). 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.

Description

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 27.4 kDa. Active form Activin-A is fused to a 6-His Tag at N-terminus and purified by standard chromatographic techniques.

Physical Appearance

Lyophilized freeze dried powder.

Formulation

Active form Activin-A was lyophilized from a concentrated 1 mg/ml protein solution containing 50 mM Tris-HCl pH 7.4.

Solubility

INHBA protein should be reconstituted in distilled water to a concentration of 50 μ g /ml. Due to the protein nature, dimers and multimers may be observed.

Stability

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Repeated freezing and thawing is not recommended.

Purity

Greater than 98% as observed by SDS-PAGE.

Amino Acid Sequence

HHHHHHGLEC DGKVNICCKK QFFVSFKDIG WNDWIIAPSG YHANYCEGEC PSHIAGTSGS SLSFHSTVIN HYRMRGHSPF ANLKSCCVPT KLRPMSMLYY DDGQNIIKKD IQNMIVEECG CS

Activity

The biological activity of INHBA is measured by its ability to inhibit mouse plasmacytoma cell line (MPC-11) cells proliferation ([3H]thymidine incorporation). ED50 <5 ng/ml.





Usage

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