

Activin-A, His Tag, tobacco, human recombinant

Catalog No: 97395 Lot No: XXXXX

Source: Nicotiana benthamiana

Synonyms: Inhba, Inhibin beta A, FSH releasing protein

Background

Activins are homodimers or heterodimers of the different? subunit isoforms, part of the TGFbeta family. Mature Activin A has two 116 amino acids residues betaA subunits (bA-bA). 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

Activin A human recombinant produced in *Nicotiana benthamiana* is a disulfide-linked homodimers of two betaA chains, each containing 116 amino residues and 6-His Tag at the N-terminus having a total molecular mass of 27.4 kDa.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from 1 mg/ml solution in Tris HCl 0.05 M buffer at pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized Activin A in sterile 18 $M\Omega$ -cm H_2O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Activin A, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Activin A should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by Analysis by SDS-PAGE.

Amino Acid Sequence

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

Usage

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