Datasheet for ABIN809199

INHBB Protein (His tag)

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Overview

Quantity:	10 µg
Target:	INHBB
Origin:	Human
Source:	Tobacco (Nicotiana benthamiana)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This INHBB protein is labelled with His tag.
Application:	Western Blotting (WB), Cell Culture (CC)

Product Details

Characteristics:	Serological Identification: The protein was electrophoresed under reducing condition on a 15 % SDS-polyacrylamide gel, transferred by electroblotting to a NC membrane and visualized by immune-detection with specific antibody Activin B. Molecular formula: C615H910N178O177S12. Isoelectric Point: 6,4. Extinction coefficient: E 0.1 % (1g/L) = 1.56 (A 280 nm). This product contains no animal-derived components or impurities. Produced by transient expression of Activin B in non-transgenic plants.
Purification:	Recombinant human Activin B contains a His-tag at the N-terminal end and is purified by sequential chromatography (FPLC).
Purity:	> 97 % by SDS polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

Product Details

Endotoxin Level:	< 0.04 EU/μg protein (LAL method)

Target Details

Target:	INHBB
Alternative Name:	INHBB (INHBB Products)
Background:	Synonyms: Activin beta-B chain, Inhibin beta B chain precursor, Inhibin, beta-2 Activins are homodimers or heterodimers of the various beta subunit isoforms, belonging to the TGF-beta family. Mature Activin B has two chains of 123 amino acids residues (betaB-betaB). Activin exhibits a wide range of biological activities, including mesoderm induction, neural cell differentiation, bone remodelling, haematopoiesis, and reproductive physiology. Activins plays a key role in the production and regulation of hormones such as FSH, LH, GnRH and ACTH. Inhibins/Activins are protein that are formed by the dimerization of two subunits, i. e. an alpha (alpha) with either beta A (betaA) - Inhibin A or beta B (betaB) - Inhibin B. The subunits betaA and betaB can also form homodimers or heterodimers called Activin: Activin A (betaA -betaA), Activin B (betaB -betaB) and Activin AB (betaA -betaB). The Activin gene family comprises the additional, but poorly characterized members' Activin betaC (betaC), beta D (betaD) and beta E (betaE). As with other members of the super-family, Activins interact with two types of cell surface trans-membrane receptors (Types I and II) which have intrinsic serine/threonine kinase activities in their cytoplasmic domains, Activin type 1 receptors, ACVR1, ACVR1B, ACVR1C and Activin type 2 receptors, ACVR2A, ACVR2B.
Molecular Weight:	14 kDa
Gene ID:	3625, 147390
Pathways:	Peptide Hormone Metabolism, Hormone Activity, Negative Regulation of Hormone Secretion

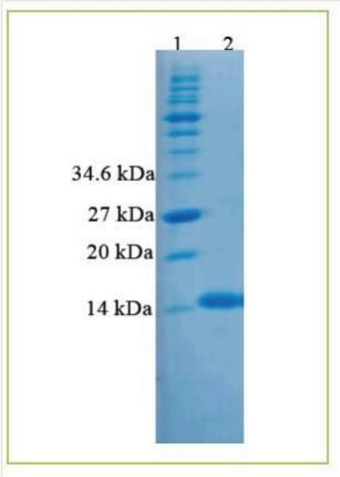
Application Details

Comment:	Biological Activity: The biological activity of Activin B is measured by its ability to inhibit mouse plasmacytoma cell line (MPC-11) cells proliferation. Less than 5 ng/mL are required to stimulate a half-maximal response at cytokine saturation. Note: Since applications vary, each investigator should titrate the reagent to obtain optimal results.
Restrictions:	For Research Use only

Handling

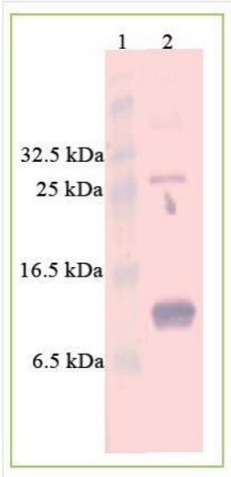
Format:	Lyophilized
Reconstitution:	Lyophilized protein should be reconstituted in water following instructions of batch Quality Control sheet. At higher concentrations the solubility may be reduced and multimers generated. Optimal concentration should be determined for specific application and cell lines.
Buffer:	Tris HCl 0.05 M buffer at pH 7.4
Storage:	4 °C

Images



SDS-PAGE

Image 1. SDS-PAGE analysis of recombinant Activin B. Samples were loaded in 15 % SDS-polyacrylamide gel and stained with Coomassie blue. Lane 1: Molecular weight marker (kDa), Lane 2: contains 0.5 µg of recombinant Activin B.



Western Blotting

Image 2. Western Blot analysis of recombinant Activin B. Lane 1: Molecular weight marker (kDa). Lane 2: 0.2 µg of Activin B.

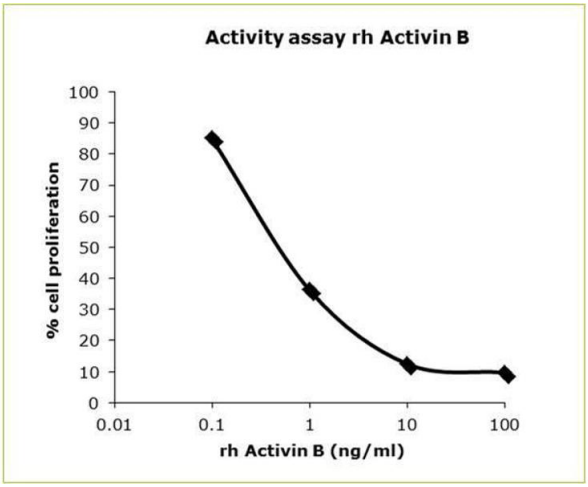


Image 3. The biological activity of Activin B is measured by its ability to inhibit mouse plasmacytoma cell line (MPC-11 cells) cells proliferation. EC50 < 5 ng/mL are required to stimulate a half-maximal response at cytokine saturation. Note: Since applications vary, each investigator should titrate the reagent to obtain optimal results.