Recombinant Human Activin B protein(His Tag)

Catalog Number: PKSH034166

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Species	Human
Source	E.coli-derived Human Activin B protein Gly 293-Ala 407, with an C-terminal His
Calculated MW	13.8 kDa
Observed MW	17 kDa
Accession	P09529
Bio-activity	Measure by its ability to induce hemoglobin expression in K562 cells.The ED_{50} for this effect is <0.7 ng/mL.The specific activity of recombinant human Activin B is > 1.5 x 10^6 IU/mg.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Activin and inhibin are two closely related protein complexes that have almost directly opposite biological effects. The activin and inhibin protein complexes are both dimeric in structure, and, in each complex, the two monomers are linked to one another by a single disulfide bond. Activin is composed of two β subunits, βA βA (activin A), βB βB (activin B), or βA βB (activin AB). Inhibin is composed of an alpha and one of two β subunits, βA (inhibin A) or βB (inhibin B). Activins are produced in many cell types and organs, such as gonads, pituitary gland, and placenta. In the ovarian follicle, activin increases FSH binding and FSH-induced aromatization. It participates in androgen synthesis enhancing LH action in the ovary and testis. In the male, activin enhances spermatogenesis. Also, Activin plays a role in wound repair and skin morphogenesis. Activin is strongly expressed in wounded skin, and overexpression of activin in the epidermis of transgenic mice improves wound healing and enhances scar formation. Activin also regulates the morphogenesis of branching organs such as the prostate, lung, and kidney. There is also evidence showed that lack of activin during development results in neural developmental defects.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com