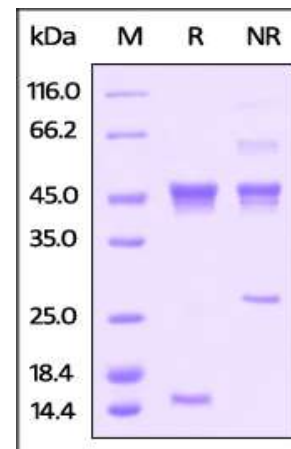


Human CellExp™ Latent Activin A / INHBA, human recombinant

CATALOG NO:	P1078-10 10 µg P1078-50 50 µg
ALTERNATE NAMES:	Activin A, INHBA
SOURCE:	HEK 293 cells (Ser 21 - Ser 426)
PURITY:	> 95% by SDS – PAGE
MOL. WEIGHT:	This protein is fused with polyhistidine tag at N terminus and the protein has a calculated MW of 13 kDa (mature) & 32 kDa (pro). The predicted N-terminus is His (pro) & Gly 311 (mature). The protein migrates as 15 kDa (mature) and 43-48 kDa (pro) under reducing (R) condition and 27 kDa (mature), 43-48 kDa (pro) and 60 kDa (pro & mature) under non-reducing (NR) condition on SDS-PAGE gel.
ENDOTOXIN LEVEL:	< 1.0 EU per 1µg of protein (determined by LAL method)
FORM:	Lyophilized
FORMULATION:	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally Mannitol or Trehalose is added as a protectant before lyophilization.
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -80°C and use within 3 months. Avoid repeated freezing and thawing cycles.
RECONSTITUTION:	Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% (W/V) HSA or BSA) is recommended for further dilution and long term storage. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -80°C.
DESCRIPTION:	Activin and inhibin are two closely related protein complexes that have almost directly opposite biological effects. Activin enhances FSH biosynthesis and secretion, and participates in the regulation of the menstrual cycle. Many other functions have been found to be exerted by activin, including roles in cell proliferation, differentiation, apoptosis, metabolism, homeostasis, immune response, wound repair, and endocrine function. Conversely inhibin down regulates FSH synthesis and inhibits FSH secretion. Activins are nonglycosylated homodimers or heterodimers of various β subunits (βA, βB, βC, and βE in mammals), while Inhibins are heterodimers of a unique α subunit and one of the β subunits. Activin A is a widely expressed homodimer of two βA

subunit to form Activin AB and Activin AC, respectively. The 14 kDa mature human βA chain shares 100% amino acid sequence identity with bovine, feline, mouse, porcine, and rat βA. Activin is produced in the gonads, pituitary gland, placenta, and other organs. The bioactivity of Activin A is regulated by a variety of mechanisms. In the ovarian follicle, activin increases FSH binding and FSH-induced aromatization; Activin is strongly expressed in wounded skin, and overexpression of activin in 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 especially kidney. Activin A increased the expression level of type-I collagen suggesting that activin A acts as a potent activator of fibroblasts; Lack of activin during development results in neural developmental defects.



The purity of human Latent Activin A / INHBA, His Tag was determined by SDS-PAGE under reducing (R) condition and staining overnight with Coomassie Blue.

RELATED PRODUCT:

- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ B7-H3 / CD276, Human recombinant (Cat. No. 9239-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp™ CD166/ ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)
- Human CellExp™ CD55/DAF, human recombinant (Cat. No. 7432-10, -50)
- Human CellExp™ CD58 /LFA-3, human recombinant (Cat. No. 7427-10, -50)
- Human CellExp™ CD62E/E-Selectin, human recombinant (Cat. No. 7434-20, -100)