

## Recombinant Human/Mouse/Rat Activin A protein(His Tag)

**Catalog Number: PKSH034165**

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

### Description

<b>Species</b>	Human/Mouse/Rat
<b>Source</b>	E.coli-derived Human/Mouse/Rat Activin A protein Gly 311-Ser 426
<b>Calculated MW</b>	13.1 kDa
<b>Observed MW</b>	15 kDa
<b>Accession</b>	P08476
<b>Bio-activity</b>	Measure by its ability to inhibit the proliferation of mouse MPC-11 cells. The ED <sub>50</sub> for this effect is <10 ng/mL. The specific activity of recombinant human Activin A is approximately >1.0 x 10 <sup>3</sup> IU/mg.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. 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.
<b>Reconstitution</b>	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. Activins, members of the TGF-beta superfamily, are disulfide-linked dimeric proteins originally purified from gonadal fluids as proteins that stimulated pituitary follicle stimulating hormone (FSH) release. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Activins are homodimers or heterodimers of the various beta subunit isoforms, while inhibins are heterodimers of a unique alpha subunit and one of the various beta subunits.