Recombinant Human/Mouse/Rat Activin A

Catalog No.: RP0007

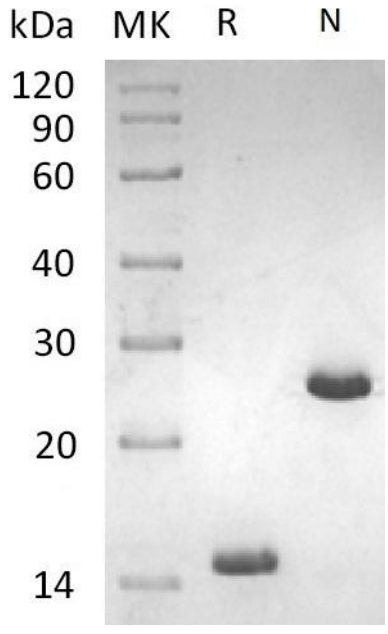
Basic Information

Information	
Source	*Human Cells*
Description	Recombinant Human Activin A is produced by our Mammalian expression system and the target gene encoding Gly311-Ser426 is expressed.
Accession	P08476
Known As	Inhibin beta A chain; INHBA; Activin A
Predicted Mol Mass	13 KDa
Apparent Mol Mass	15 KDa, reducing conditions

Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 4mM HCl.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

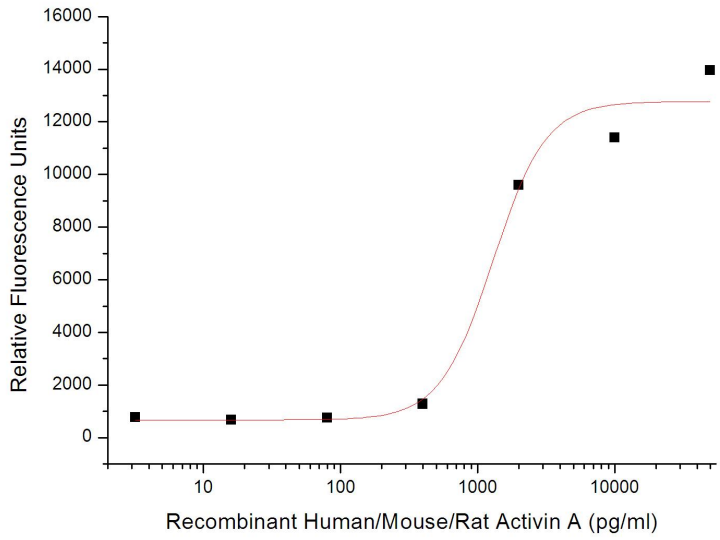
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured by its ability to induce SMAD signaling in 293-Activin A Res cells(XCC11). The ED50 for this effect is 1.3 ng/ml (Regularly tested).

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.