



Recombinant Protein Technical Manual
Recombinant Human Activin RIIA/ACVR2A Protein
(His Tag)(Active)
RPES5020

Product Data:

Product SKU: RPES5020

Size: 100µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001607.1

Protein Information:

Molecular Mass: 14.9 kDa

AP Molecular Mass: 35-40 kDa

Tag: C-His

Bio-activity: Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.4-3 µg/mL in the presence of 10 ng/mL recombinant Activin A

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Activin Receptor Type-2A; Activin Receptor Type IIA; ACTR-IIA; ACTRIIA; ACVR2A; ACVR2;ACTRII

Immunogen Information:

Sequence: Met 1-Pro 134

Background:

ACVR2A and ACVR2B are two activin type II receptors. ACVR2A has been shown to interact with INHBA, SYNJ2BP and ACVR1B. The bovine ACVR2A gene encodes a protein of 513 amino acids which is highly homologous (approximately 98% identity) to the rat, mouse, and human ACVR2A proteins. Inactivation of ACVR2A is a common event in prostate cancer cells suggesting it may play an important role in the development of prostate cancer. The ACVR2A gene is a putative tumor suppressor gene that is frequently mutated in microsatellite-unstable colon cancers (MSI-H colon cancers). Frameshift mutation of ACVR2A may contribute to MSI-H colon tumorigenesis via disruption of alternate TGF-beta effector pathways.