

Recombinant Protein Technical Manual

Recombinant Mouse Activin RIIA/ACVR2A Protein (His Tag)(Active)

RPES0821

Product Data:

Product SKU: RPES0821 **Size:** 100μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 031422.3

Protein Information:

Molecular Mass: 14.8 kDa

AP Molecular Mass: 35 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 0.6-3 µg/mL in the presence of 10

ng/ml Recombinant Human Activin A.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein 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: Actrlla;Acvr2;Tactrll

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.