



Recombinant Protein Technical Manual

Recombinant Human Activin RIIA/ACVR2A Protein (Fc & His Tag)(Active) RPES1977

Product Data:

Product SKU: RPES1977

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P27037

Protein Information:

Molecular Mass: 41.2 kDa

AP Molecular Mass: 36 kDa

Tag: C-Fc-6His

Bio-activity: Immobilized Human INHBC-His(Cat: PKSH032587) at 0.8µg/ml(100 µl/well) can bind Human ACVR2A-Fc-6His. The ED50 of Human ACVR2A-Fc-6His is 6.73 ug/ml.

Purity: > 95 % 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 a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

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

Application: Functional ELISA

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

Immunogen Information:

Sequence: Ala20-Pro134

Background:

Activin Receptor Type-2A is a protein that in humans is encoded by the ACVR2A gene. ACVR2A is an activin type 2 receptor. This gene encodes activin A type II receptor. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. Type II receptors are considered to be constitutively active kinases.