



Recombinant Protein Technical Manual

Recombinant Human ALK-2/ACVR1 Protein (Human Cells, His Tag)

RPES1938

Product Data:

Product SKU: RPES1938

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q04771

Protein Information:

Molecular Mass: 12.6 kDa

AP Molecular Mass: 17 kDa

Tag: C-6His

Bio-activity:

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:

Synonyms: Activin Receptor Type; Activin Receptor Type I; ACTR-I; Activin Receptor-Like Kinase 2; ALK-2; Serine/Threonine-Protein Kinase Receptor R1; SKR1; TGF-B Superfamily Receptor Type I; TSR-I; ACVR1; ACVRLK2;ACVR1A;ACVRLK2;ALK2;FOP;SKR1

Immunogen Information:

Sequence: Met21-Val124

Background:

Activin receptor type, also known as Activin receptor type I, Activin receptor-like kinase 2, Serine/threonine-protein kinase receptor R1, TGF-B superfamily receptor type I, ACVRLK2 and ACVR1, is a single-pass type I membrane protein. ACVR1 is expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells. ACVR1 belongs to the protein kinase superfamily. 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. ACVR1 signals a particular transcriptional response in concert with activin type II receptors.