Recombinant Protein Technical Manual

Recombinant Human ALK/ACVRL1 Protein (Fc Tag)(Active)

RPES0489

Product Data:

Product SKU: RPES0489

Size: 100µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000011.2

Protein Information:

Molecular Mass: 37.4 kDa

AP Molecular Mass: 45-50 kDa

Tag: C-Fc

Bio-activity: 1. Measured by its ability to bind Human ENG-Fc in functional Elisa.2. Measured by its ability to latent TGFB1-His in functional Elisa.3. Measured by its ability to mouse ENG-His in functional Elisa.4. Measured by its ability to inhibit BMP9 induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. David, L. et al. (2007) Blood 109:1953. The ED50 for this effect is typically 55 ng/mL in the presence of 2 ng/mL of recombiant human BMP9.

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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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: Functional ELISA

Synonyms: Serine/Threonine-Protein Kinase Receptor R3; SKR3; Activin Receptor-Like Kinase 1; ALK; TGF-B Superfamily Receptor Type I; TSR-I; ACVRL1; ACVRLK1; ALK1;HHT;HHT2;ORW2;SKR3

Immunogen Information:

Sequence: Met 1-Gln 118

Background:

Activin A receptor, type II-like 1 (ACVRL1), also known as ALK (activin receptor-like kinase 1), is an endothelial-specific type I receptor of the TGF-beta (transforming growth factor beta) receptor family of ligands. On ligand binding, a heteromeric receptor complex forms consisting of two type II and two type I transmembrane serine/threonine kinases. ACVRL1 protein is expressed in certain blood vessels of kidney, spleen, heart and intestine, serving as an important role during vascular development. Mutations in ACVRL1 gene are associated with hemorrhagic telangiectasia type 2, also known as Rendu-Osler-Weber syndrome 2 and vascular disease.