

Recombinant Protein Technical Manual Recombinant Mouse BMPR1B/ALK-6 Protein (Fc Tag) RPES0333

Product Data:

Product SKU: RPES0333 **Size:** 20μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 031586.1

Protein Information:

Molecular Mass: 39.4 kDa

AP Molecular Mass:

Tag: C-Fc

Bio-activity:

Purity: > (88.3+9.9) % 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: Acvrlk6;Al385617;ALK-6;Alk6;AV355320;BMPRB;BMPR-IB;CFK-43a;SKR6

Immunogen Information:

Sequence: Lys14-Lys126

Background:

BMPR1B(bone morphogenetic protein receptor, type IB), also known as ALK6, is a a member of the bone morphogenetic protein (BMP) receptor family. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. BMPR1B is the major transducer of signals in precartilaginous condensations as demonstrated in experiments using constitutively active BMPR1B receptors. BMPR1B is a more effective trasducer of GDF5 than BMPR1A. Unlike BMPR1A null mice, which die at an early embryonic stage, BMPR1B null mice are viable.