



Recombinant Protein Technical Manual

Recombinant Human BMPR1B/ALK-6 Protein (aa 149-502, His&GST Tag)
RPES3041

Product Data:

Product SKU: RPES3041

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_001194.1

Protein Information:

Molecular Mass: 68.3 kDa

AP Molecular Mass: 55 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as sterile 50mM Tris, 100mM NaCl, pH 8.5, 20% gly, 0.3mM DTT

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

Application:

Synonyms: ALK-6;ALK6;CDw293

Immunogen Information:

Sequence: Arg 149-Leu 502

Background:

BMPR1B(bone morphogenetic protein receptor, type IB), also known as ALK6, is 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 transducer of GDF5 than BMPR1A. Unlike BMPR1A null mice, which die at an early embryonic stage, BMPR1B null mice are viable.