Recombinant Mouse Bone Morphogenetic Protein Receptor Type IA/Activin Receptor-like Kinase 3 Protein

Cat.NO.: TP04642

3th Edition

Synonyms:ALK-3;Bone morphogenetic protein receptor type-1A;BMP type-1A receptor;BMPR-1A;Activin receptor-like kinase 3;BMP-2/BMP-4 receptor;Serine/threonine-protein kinase receptor R5;SKR5;CD292;;Acvrlk3

Description:ALK-3 is a type I receptor for bone morphogenetic proteins (BMPs) which belong to the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGFB receptor subfamily. The BMP receptors consists of the type I receptors BMPR1A and BMPR1B and the type I I receptor BMPR2. Seven known type I serine/threonine kinases and five mammalian type II serine/threonine kinase receptors function in TGF-beta superfamily signal transduction. The downstream molecules of the type I BMP receptors include the Smad (Smad1, 5 and 8) proteins that are phosphorylated in a ligand-dependent manner, and relay the BMP signal from the receptors to target genes in the nucleus. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. ALK-3 contains a GS domain and a protein kinase domain. ALK-3 is widely expressed. Defects in BMPR1A gene are a cause of a significant proportion of cases of Juvenile polyposis syndrome (JPS).

Form:PBS

Molecular Weight:42.2 kDa

Sequences: Gln24-Arg152

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.