

Recombinant Protein Technical Manual Recombinant Human BMPRIA/ALK-3 Protein (Fc & His Tag) RPES3483

Product Data:

Product SKU: RPES3483

Species: Human

Size: $10 \mu g$

Expression host: Human Cells

Uniprot: P36894

Protein Information:

Molecular Mass:	42.1 kDa
AP Molecular Mass:	60 kDa
Tag:	C-Fc-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 μ m filtered solution of PBS, pH 7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Bone Morphogenetic Protein Receptor TypeA; BMP TypeA Receptor; BMPRA; Activin Receptor-Like Kinase 3; ALK-3; Serine/Threonine-Protein Kinase Receptor R5; SKR5; CD292; BMPR1A; ACVRLK3; ALK3;10q23del

Sequence: Gln24-Arg152

Background:

Bone Morphogenetic Protein Receptor TypeA (BMPR1A) belongs to the TKL Ser/Thr protein kinase family and TGFB receptor subfamily, including the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. BMPR1A is a single-pass type I membrane protein and highly expressed in skeletal muscle. BMPR1A contains one GS domain and one protein protein kinase domain. BMPR1A is necessary for the extracellular matrix deposition by osteoblasts. BMPR1A can activate SMAD transcriptional regulators, binding with ligands. Defects in BMPR1A are a cause of juvenile polyposis syndrome, Cowden disease and hereditary mixed polyposis syndrome 2 (HMPS2).