

**Recombinant Protein Technical Manual** 

Recombinant Human Activin Receptor 2B/ACVR2B Protein (His Tag) RPES1998

## Product Data:

Product SKU: RPES1998

Species: Human

Size: 10µg

Expression host: Human Cells

**Uniprot:** Q13705

## **Protein Information:**

Molecular Mass:	14.4 kDa
AP Molecular Mass:	33 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ 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 $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Activin Receptor Type-2B; Activin Receptor Type IIB; ACTR-IIB; ACVR2B;Bone Morphogenetic Protein Receptor Type-2; BMP Type-2 Receptor; BMPR-2; Bone Morphogenetic Protein Receptor Type II; BMP Type II Receptor

## Sequence: Ser19-Thr134

## Background:

Activin proteins that belong to the transforming growth factor-beta (TGF-β) superfamily, exert their biological actions by binding to heteromeric receptor complexes of type I and type II serine/threonine kinase receptors. On ligand binding, type I and II receptors form a stable complex, resulting in phosphorylation of type I receptors by type II receptors with constitutive kinase activity, and subsequently initiates the activation of downstream molecules including the endogenous Smads. ActRIIB, also known as ActRIIB, is a type II receptor containing an extracellular domain (ECD), a transmembrane segment, and a cytoplasmic region that includes the kinase domain. ActRIIB is a receptor for activin A, activin B and inhibin A. Multiple ActRIIB isoforms can also be generated, which bind activin isoforms with different affinities.