

# Recombinant Rhesus ACVR1B Protein, C-hFc-tagged

## Product Information

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<b>Cat</b>	IMP-1803
<b>Official Symbol</b>	ACVR1B
<b>Product Overview</b>	Recombinant rhesus ACVR1B (NP_001252559.1) (Met1-Glu126) was expressed, fused with the Fc region of human IgG1 at the C-terminus.
<b>Description</b>	ALK-4 (Activin Receptor-Like Kinase 4) or ACVR1B (Activin A Receptor, type 1B), belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family, and TGFB receptor subfamily. ALK-4/ACVR1B acts as a transducer of activin or activin like ligands signals. Activin binds to either ACVR2A or ACVR2B and then forms a complex with ACVR1B. The known type II activin receptors include ActRII and ActRIIB, while the main type I activin receptor in mammalian cells is ALK-4 (ActRIB). In the presence of activin, type II and type I receptors form complexes whereby the type II receptors activate ALK-4 through phosphorylation. The activated ALK-4, in turn, transduces signals downstream by phosphorylation of its effectors, such as Smads, to regulate gene expression and affect cellular phenotype. ALK-4/ACVR1B is an important regulator of vertebrate development, with roles in mesoderm induction, primitive streak formation, gastrulation, dorsoanterior patterning, and left-right axis determination.
<b>Expression System</b>	HEK293
<b>Species</b>	Rhesus
<b>Tag</b>	C-hFc
<b>Predicted N Terminal</b>	Arg 27
<b>Form</b>	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
<b>Molecular Mass</b>	The recombinant rhesus ACVR1B comprises 341 amino acids and has a calculated molecular mass of 38.2 KDa.
<b>Protein length</b>	Met1-Glu126
<b>Endotoxin</b>	< 1.0 EU/μg of the protein as determined by the LAL method
<b>Purity</b>	> 85 % as determined by SDS-PAGE
<b>Storage</b>	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Reconstitution</b>	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

**SDS-PAGE**

