

RPCB0245

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## Product Information

<b>Product SKU:</b>	RPCB0245	<b>Gene ID:</b>	91	<b>Size:</b>	20µg
<b>Tag:</b>	C-hFc&his	<b>Reactivity:</b>	Human		

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## Additional Information

<b>Expression Host:</b>	HEK293 cells	<b>Swissprot:</b>	P36896-1
<b>Purity:</b>	> 97% by SDS-PAGE.		

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## Protein Information

**Background:** 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 TGFβ 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.

**Protein Description:** High quality, high purity and low endotoxin recombinant Recombinant Human ALK-4/ACVR1B Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE. 100% guaranteed.

**Endotoxin:** < 0.1 EU/µg of the protein by LAL method.

**Formulation:** Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

**Contact Details | Dublin, Ireland**

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**Storage:**

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.