

Recombinant Human ACVR1B

Catalog No: CA60

Description Recombinant Human Activin Receptor Type-1B is produced by our Mammalian expression system and

the target gene encoding Ser24-Glu126 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Activin Receptor Type-1B; Activin Receptor Type IB; ACTR-IB; Activin Receptor-Like Kinase 4; ALK-

4; Serine/Threonine-Protein Kinase Receptor R2; SKR2; ACVR1B; ACVRLK4; ALK4

Accession No. P36896

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100μg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence SGPRGVQALLCACTSCLQANYTCETDGACMVSIFNLDGMEHHVRTCIPKVELVPAGKPFYCLSSEDLRN

THCCYTDYCNRIDLR VPSGHLKEPEHPSMWGPVEVDHHHHHH

Activin Receptor Type-1B (ACVR1B) is a single-pass type I membrane protein that belongs to the protein kinase superfamily. ACVR1B contains one GS domain and one protein kinase domain and is expressed in many tissues, most strongly in kidney, pancreas, brain, lung, and liver. 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, ACVR2A or ACVR2B activating ACVR1B through phosphorylation of its regulatory GS domain. They go on to recruit the R- SMADs, SMAD2 and SMAD3. ACVR1B also transducers signals of nodal, GDF-1, and Vg1. Mutations in ACVR1B are associated with pituitary tumors.

Background

R NR MK kDa 120 90 60 40 30 20

SDS-Page

