*m*Activin RIB/ALK-4 VersaClone cDNA

Catalog Number: RDC2933

Specifications:

Gene:	*m*Acvr1b
Accession:	NP_031421
Insert size:	1531bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

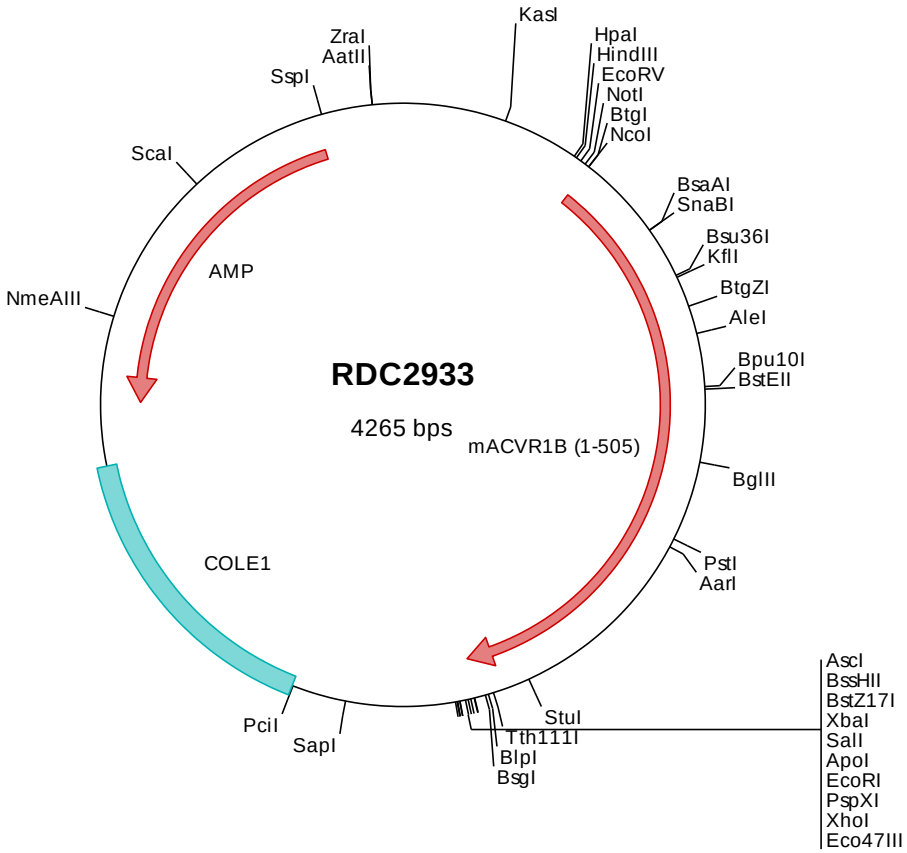
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*m*Activin RIB/ALK-4 cDNA Plasmid

Acvr1b activin A receptor, type 1B [*Mus musculus* (house mouse)]

Also known as: Alk4; SKR2; ALK-4; ActRIB; ActR-IB; Acvrlk4; 6820432J04

Summary:
Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Type I receptors are essential for signaling and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. ACVR1B is a type I receptor. Mutations in ACVR1B are associated with pituitary tumors.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
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> RDC2933 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atggcggagt cggccggagc ctcctccttc ttcccccttg ttgtcctcct
 501  gctcgccggc agcggcgggt ccgggccccg ggggatccag gctctgctgt gtgcgtgcac cagctgccta cagaccaact acacctgtga gacagatggg
 601  gcttgcatgg tctccatctt taacctggat ggcgtggagc accatgtacg tacctgcatc cccaaggtgg agctggttcc tgctggaaag ccctttctact
 701  gcctgagttc agaggatctg cgcaacacac actgctgcta tattgacttc tgcaacaaga ttgacctcag ggtccccagc ggacacctca aggagcctgc
 801  gcacccctcc atgtggggcc ctgtggagct ggtcggcatc atcgccggcc ccgtcttcct cctcttcctt atcattatca tcgtcttcct ggtcatcaac
 901  tatcaccagc gtgtctacca taaccgccag aggttggaca tggaggaccc ctcttgcgag atgtgtctct ccaaagacaa gacgctccag gatctcgtct
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1201  taccagaccg tcatgctgcg ccatgaaaac atccttggct ttattgctgc tgacaataaa gataatggca cctggaccca gctgtggctt gtctctgact
1301  atcacgagca tggctcactg tttgattatc tgaaccgcta cacagtgacc attgagggaa tgattaagct agccttgtct gcagccagtg gtttggcaca
1401  cctgcatatg gagattgtgg gcactcaagg gaagccggga attgctcatc gagacttgaa gtcaaagaac atcctggtga aaaaaaatgg catgtgtgcc
1501  attgcagacc tgggcctggc tgtccgtcat gatgcggtca ctgacaccat agacattgct ccaaatcaga gggtggggac caaacgatac atggctcctg
1601  aagtccttga cgagacaatc aacatgaagc actttgactc cttcaaatgt gccgacatct atgccctcgg gcttgtctac tgggagattg cacgaagatg
1701  caatttctgga ggagtccatg aagactatca actgccgtat tacgacttag tgccctccga cccttccatt gaggagatgc gaaaggttgt atgtgaccag
1801  aagctacggc ccaatgtccc caactggtgg cagagttatg aggccttgcg agtgatggga aagatgatgc gggagtgctg gtacgccaat ggtgctgccc
1901  gtctgacagc tctgcgcatc aagaagactc tgtcccagct aagcgtgcag gaagatgtga agatttaaag gcgcgccagt atactctaga gtcgacaccc
2001  ggggaattcc tcgagcgctc gtctctagct tggcgtaatc atggtcatag ctgtttcctg tgtgaaattg ttatccgctc acaattccac acaacatacg
2101  agccggaagc ataaagtgta aagcctgggg tgcctaatga gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc gggaaacctg
2201  tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt gcgtattggg cgctcttccg cttcctcgct cactgactcg ctgcgctcgg
2301  tcgttcggct gcggcgagcg gtatcagctc actcaaaggc ggtaatacgg ttatccacag aatcagggga taacgcagga aagaacatgt gagcaaaagg
2401  ccagcaaaag gccaggaacc gtaaaaaggc cgcgttgctg gcgtttttcc ataggctccg ccccctgac gagcatcaca aaaatcgacg ctcaagtcag
2501  aggtggcgaa acccgacagg actataaaga taccaggcgt ttccccctgg aagctccctc gtgcgctctc ctgttccgac cctgccgctt accggatacc
2601  tgtccgcctt tctcccttcg ggaagcgtgg cgctttctca atgctcacgc tgtaggtatc tcagttcggt gtaggtcgtt cgctccaagc tgggctgtgt
2701  gcacgaaccc cccgttcagc ccgaccgctg cgccttatcc ggtaactatc gtcttgagtc caacccggta agacacgact tatcgccact ggcagcagcc
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3401  gccgagcgca gaagtggtcc tgcaacttta tccgcctcca tccagtctat taattgttgc cgggaagcta gagtaagtag ttcgccagtt aatagtttgc
3501  gcaacgttgt tgccattgct acaggcatcg tggtgtcacg ctcgtcgttt ggtatggctt cattcagctc cggttcccaa cgatcaaggc gagttacatg
3601  atcccccatg ttgtgcaaaa aagcggttag ctccttcggt cctccgatcg ttgtcagaag taagttggcc gcagtgttat cactcatggt tatggcagca
3701  ctgcataatt ctcttactgt catgccatcc gtaagatgct tttctgtgac tggtgagtac tcaaccaagt cattctgaga atagtgtatg cggcgaccga
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> RDC2933 Translated Insert Sequence

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101  cnkidlrvps ghlkepahps mwgpvelvgi iagpvfllfl iiiivflvin yhqrvyhnrq rldmedpsce mclskdktlq dlvydlstsg sgsglplfvq
201  rtvartivlq eiigkgrfge vwrgrwrggd vavkifssre erswfreaei yqtvmlrhen ilgfiaadnk dngtwtqlwl vsdyhehgsl fdylnrytvt
301  iegmiklals aasglahlhm eivgtqgkpg iahrdlkskn ilvkkngmca iadlglavrh davtdtidia pnqrvgtkry mapevldeti nmkhfdsfkc
401  adiyalglvy weiarrcnsg gvhedyqlpy ydlvpsdpsi eemrkvvcdq klrpnvpnww qsyealrvmg kmmrecwyan gaarltalri kktlsqlsvq
501  edvki
```