

Product datasheet for SC308835

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Activin A Receptor Type IB (ACVR1B) (NM_020327) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Activin A Receptor Type IB (ACVR1B) (NM_020327) Human Untagged Clone

Tag: Tag Free Symbol: ACVR1B

Synonyms: ACTRIB; ACVRLK4; ALK4; SKR2

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_020327, the custom clone sequence may differ by one or more

nucleotides

ATGGCGGAGTCGGCCGGAGCCTCCTTCTTCCCCCTTGTTGTCCTCCTGCTCGCCGGC CAGGCCAACTACACGTGTGAGACAGATGGGGCCTGCATGGTTTCCATTTTCAATCTGGAT GGGATGGAGCACCATGTGCGCACCTGCATCCCCAAAGTGGAGCTGGTCCCTGCCGGGAAG CCCTTCTACTGCCTGAGCTCGGAGGACCTGCGCAACACCCACTGCTGCTACACTGACTAC TGCAACAGGATCGACTTGAGGGTGCCCAGTGGTCACCTCAAGGAGCCTGAGCACCCGTCC ATGTGGGGCCCGGTGGAGCTGGTAGGCATCATCGCCGGCCCGGTGTTCCTCCTGTTCCTC ATCATCATCATTGTTTTCCTTGTCATTAACTATCATCAGCGTGTCTATCACAACCGCCAG AGACTGGACATGGAAGATCCCTCATGTGAGATGTCTCTCCAAAGACAAGACGCTCCAG GATCTTGTCTACGATCTCTCCACCTCAGGGTCTGGCTCAGGGTTACCCCTCTTTGTCCAG CGCACAGTGGCCCGAACCATCGTTTTACAAGAGATTATTGGCAAGGGTCGGTTTGGGGAA GTATGGCGGGGCCGCTGGAGGGGTGGTGATGTGGCTGTGAAAATATTCTCTTCTCGTGAA GAACGGTCTTGGTTCAGGGAAGCAGAGATATACCAGACGGTCATGCTGCGCCATGAAAAC ATCCTTGGATTTATTGCTGCTGACAATAAAGATAATGGCACCTGGACACAGCTGTGGCTT GTTTCTGACTATCATGAGCACGGGTCCCTGTTTGATTATCTGAACCGGTACACAGTGACA ATTGAGGGGATGATTAAGCTGGCCTTGTCTGCTGCTAGTGGGCTGGCACACCTGCACATG GAGATCGTGGGCACCCAAGGGAAGCCTGGAATTGCTCATCGAGACTTAAAGTCAAAGAAC ATTCTGGTGAAGAAAAATGGCATGTGTGCCATAGCAGACCTGGGCCTGGCTGTCCGTCAT GATGCAGTCACTGACACCATTGACATTGCCCCGAATCAGAGGGTGGGGACCAAACGATAC ATGGCCCCTGAAGTACTTGATGAAACCATTAATATGAAACACTTTGACTCCTTTAAATGT GCTGATATTTATGCCCTCGGGCTTGTATATTGGGAGATTGCTCGAAGATGCAATTCTGGA GGAGTCCATGAAGAATATCAGCTGCCATATTACGACTTAGTGCCCTCTGACCCTTCCATT GAGGAAATGCGAAAGGTTGTATGTGATCAGAAGCTGCGTCCCAACATCCCCAACTGGTGG CAGAGTTATGAGGTAAGAAGCTGGCCTCCTGCTGCTTTCCCATCAGCCTGA

Restriction Sites: Please inquire ACCN: NM_020327



Activin A Receptor Type IB (ACVR1B) (NM_020327) Human Untagged Clone - SC308835

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 020327.2</u>, <u>NP 064732.2</u>

RefSeq Size: 1783 bp RefSeq ORF: 1431 bp

Locus ID: 91

 UniProt ID:
 P36896

 Cytogenetics:
 12q13.13

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Adherens junction, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor

interaction, Endocytosis, MAPK signaling pathway, Pancreatic cancer, Pathways in cancer,

TGF-beta signaling pathway



Gene Summary:

This gene encodes an activin A type IB receptor. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I and two type II receptors. This protein is a type I receptor which is essential for signaling. Mutations in this gene are associated with pituitary tumors. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (b) has a shorter N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.