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

Product datasheet for SC323433

ACVRL1 (NM_000020) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACVRL1 (NM_000020) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACVRL1
Synonyms:	ACVRLK1; ALK-1; ALK1; HHT; HHT2; ORW2; SKR3; TSR-I
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC323433 sequence for NM_000020 edited (data generated by NextGen Sequencing)
ATGACCTTGGGCTCCCCCAGGAAAGGCCTTCTGATGCTGCTGATGGCCTTGGTGACCCAG
GGAGACCCTGTGAAGCCGTCTCGGGGCCCGCTGGTGACCTGCACGTGTGAGAGCCCACAT
TGCAAGGGGCCTACCTGCCGGGGGGCCTGGTGCACAGTAGTGCTGGTGCGGGAGGAGGGG
AGGCACCCCCAGGAACATCGGGGCTGCGGGAACTTGCACAGGGAGCTCTGCAGGGGGCGC
CCCACCGAGTTCGTCAACCACTACTGCTGCGACAGCCACCTCTGCAACCACAACGTGTCC
CTGGTGCTGGAGGCCACCCAACCTCCTTCGGAGCAGCCGGGAACAGATGGCCAGCTGGCC
CTGATCCTGGGCCCCGTGCTGGCCTTGCTGGCCCTGGTGGCCCTGGGTGTCCTGGGCCTG
TGGCATGTCCGACGGAGGCAGGAGAAGCAGCGTGGCCTGCACAGCGAGCTGGGAGAGTCC
AGTCTCATCCTGAAAGCATCTGAGCAGGGCGACAGCATGTTGGGGGACCTCCTGGACAGT
GACTGCACCACAGGGAGTGGCTCAGGGCTCCCCTTCCTGGTGCAGAGGACAGTGGCACGG
CAGGTTGCCTTGGTGGAGTGTGTGGGAAAAGGCCGCTATGGCGAAGTGTGGCGGGGCTTG
TGGCACGGTGAGAGTGTGGCCGTCATGATCTTCTCCTCGAGGGATGAACAGTCCTGGTTC
CGGGAGACTGAGATCTATAACACAGTGTTGCTCAGACACGACAACATCCTAGGCTTCATC
GCCTCAGACATGACCTCCCGCAACTCGAGCACGCAGCTGTGGCTCATCACGCACTACCAC
GAGCACGGCTCCCTCTACGACTTTCTGCAGAGACAGACGCTGGAGCCCCATCTGGCTCTG
AGGCTAGCTGTGTCCGCGGCATGCGGCCTGGCGCACCTGCACGTGGAGATCTTCGGTACA
CAGGGCAAACCAGCCATTGCCCACCGCGACTTCAAGAGCCGCAATGTGCTGGTCAAGAGC
AACCTGCAGTGTTGCATCGCCGACCTGGGCCTGGCTGTGATGCACTCACAGGGCAGCGAT
TACCTGGACATCGGCAACAACCCGAGAGTGGGCACCAAGCGGTACATGGCACCCGAGGTG
CTGGACGAGCAGATCCGCACGGACTGCTTTGAGTCCTACAAGTGGACTGACATCTGGGCC
TTTGGCCTGGTGCTGTGGGAGATTGCCCGCCGGACCATCGTGAATGGCATCGTGGAGGAC
TATAGACCACCCTTCTATGATGTGGTGCCCAATGACCCCAGCTTTGAGGACATGAAGAAG
GTGGTGTGTGTGGATCAGCAGACCCCCACCATCCCTAACCGGCTGGCTGCAGACCCGGTC
CTCTCAGGCCTAGCTCAGATGATGCGGGAGTGCTGGTACCCAAACCCCTCTGCCCGACTC
ACCGCGCTGCGGATCAAGAAGACACTACAAAAAATTAGCAACAGTCCAGAGAAGCCTAAA
GTGATTCAATAG

Clone variation with respect to NM_000020.2
686 a=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_000020 unedited
ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGA
CACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGAGGAAACGGTTTA
TTAGGAGGGAGTGGTGGAGCTGGGCCAGGCAGGAAGACGCTGGAATAAGAAACATTTTTGCTCCAGCCCC
CATCCCAGTCCCGGGAGGCTGCCGCGCCAGCTGCGCCGAGCGAGCCCCTCCCCGGCTCCAGCCCGGTCCG
GGGCCGCGCCCGGACCCCAGCCCGCCGTCCAGCGCTGGCGGTGCAACTGCGGGCCGCGCGGTGGAGGGGA
GGTGCCCCCGGTCCGCCAAAGGCTACCGCCCCGCCCCCCGCAAAACGGGGCCCAGAGGGACCATGAACCT
TGGGCTCCCCCAGAAAGGGCCTTTTGATGCCTGTTAAGGCCTGGGTAACCCAGGGAAACCTGGTAAAGCC
GCCTCGGGGCCGATGGGGACTGGAAAGGGAAAAACCCCTCTTTAAGGGGGCTAAATGCCAGG

Kinase Domain Sequence:

>SC323433 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
CGGGCTGGTGATGTGTGGGAAGGCCGCTATGGCGAAGTGTGGCGGGGCTTGTGGCACGGTGAGAGTGTGG
CCGTCATGATCTTCTCCTCGAGGGATGAACAGTCCGCTTGTGGCACGGTGAGAGTGTGGCCGTCATGATC
TTCTCCTCGAGGGATGAACAGTCCTGGTTCCGGGAGACTGAGATCTATAACACAGTGTTGCTCAGACACG
ACAACATCCTAGGCTTCATCGCCTCAGACATGACCTCCCGCAACT

Restriction Sites: Please inquire

ACCN: NM_000020

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 kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.
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:	NM_000020.1, NP_000011.1
RefSeq Size:	1970 bp
RefSeq ORF:	1512 bp
Locus ID:	94
UniProt ID:	P37023
Cytogenetics:	12q13.13
Domains:	Activin_recp, pkinase, TyrKc, S_TKc, GS
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, TGF-beta signaling pathway
Gene Summary:	This gene encodes a type I cell-surface receptor for the TGF-beta superfamily of ligands. It shares with other type I receptors a high degree of similarity in serine-threonine kinase subdomains, a glycine- and serine-rich region (called the GS domain) preceding the kinase domain, and a short C-terminal tail. The encoded protein, sometimes termed ALK1, shares similar domain structures with other closely related ALK or activin receptor-like kinase proteins that form a subfamily of receptor serine/threonine kinases. Mutations in this gene are associated with hemorrhagic telangiectasia type 2, also known as Rendu-Osler-Weber syndrome 2. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same isoform.