

Product datasheet for **SC323474**

Activin A Receptor Type IC (ACVR1C) (NM_145259) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Activin A Receptor Type IC (ACVR1C) (NM_145259) Human Untagged Clone
Tag:	Tag Free
Symbol:	Activin A Receptor Type IC
Synonyms:	ACVRLK7; ALK7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_145259, the custom clone sequence may differ by one or more nucleotides

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ATGACCCGGGCGCTCTGCTCAGCGCTCCGCCAGGCTCTCCTGCTGCTCGCAGCGGCCGCCGAGCTCTCGC
CAGGACTGAAGTGTGTATGTCTTTGTGTGATTCTTCAAACCTTACCTGCCAAACAGAAGGAGCATGTTG
GGCATCAGTCATGCTAACCAATGGAAAAGAGCAGGTGATCAAAATCCTGTGTCTCCCTCCAGAACTGAAT
GCTCAAGTCTTCTGTATAGTTCCAACAATGTTACCAAAACCGAATGCTGCTTACAGATTTTTGCAACA
ACATAACACTGCACCTTCCAACAGCATACCAAAATGCCCAAACTTGGACCCATGGAGCTGGCCATCAT
TATTACTGTGCCTGTTTGCCTCCTGTCCATAGCTGCGATGCTGACAGTATGGGCATGCCAGGTCGACAG
TGCTCCTACAGGAAGAAAAGAGACCAAAATGTGGAGGAACCACTCTCTGAGTGAATCTGGTAAATGCTG
GAAAACTCTGAAAGATCTGATTTATGATGTGACCGCCTCTGGATCTGGCTCTGGTCTACCTCTGTTGGT
TCAAAGGACAATTGCAAGGACGATTGTGCTTACAGGAAATAGTAGGAAAAGGTAGATTTGGTGAGGTGTGG
CATGGAAGATGGTGTGGGAAGATGTGGCTGTGAAAATATTCTCCTCCAGAGATGAAAGATCTTGGTTTC
GTGAGGCAGAAATTTACCAGACGGTCACTGCTGCGACATGAAAACATCCTTGGTTTCATTGCTGCTGACAA
CAAAGATAATGGAACCTGGACTCAACTTGGCTGGTATCTGAATATCATGAACAGGGCTCCTTATATGAC
TATTTGAATAGAAATATAGTGACCGTGGCTGGAATGATCAAGCTGGCGCTCTCAATTGCTAGTGGTCTGG
CACACCTTCATATGGAGATTGTTGGTACACAAGGTAACCTGCTATTGCTCATCGAGACATAAAAACAAA
GAATATCTTAGTGAAAAGTGTGAAACTTGTGCCATAGCGGACTTAGGGTTGGCTGTGAAGCATGATTCA
ATACTGAACACTATCGACATACCTCAGAATCCTAAAGTGGGAACCAAGAGGTATATGGCTCCTGAAATGC
TTGATGATACAATGAATGTGAATATCTTTGAGTCTTCAAACGAGCTGACATCTATTCTGTTGGTCTGGT
TACTGGGAAATAGCCCGGAGGTGTTGAGTGGGAAATGTTGAGGAGTACCAATTGCCTTATTATGAC
ATGGTGCCTTCAGATCCCTCGATAGAGGAAATGAGAAAGGTTGTTTGTGACCAGAAGTTTCGACCAAGTA
TCCCAAACAGTGGCAAAGTTGTGAAGCACTCCGAGTCATGGGGAGAATAATGCGTGAGTGTGGTATGC
CAACGGAGCGGCCCGCTAACTGCTCTTCGTATTAAGAAGACTATATCTCAACTTGTGTCAAAGAAGAC
TGCAAAGCCTAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_145259 unedited CCGCCCCTCGAGCAATGGGCGGTAGGCGCTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA ACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTCCATGCTACAG AGTAGTAATCCCTGCTTATCACTGCAAGATATTGCTGAAATAGTGTAACCCTTGGTTGGGTCCCAAAAT TATTTTTGAAATTTACTGGTCAGTGAATTTCCAAATCTGGTAACCACCATTATCAGGACTGAAGTGTG TATGCTTTTTGTGTGATTCTTCAAACCTTACCTGCCAAACAGAAGGAGCATGTTGGGCATCAGTCATGCT AACCCAATGGGAAAAGAGCAGGTGATCAAATCCTGTTGTCTCCCTCCAGACTGATGCTTAAGTCCTTCT GTCTATTCACCATGTTACCAAACCGATGCTGCTCCAAGATTTTGCAACAACATACCCTGCACCTCCACC AGCATCAGAAATGCCAAACTTGACCCATGGGAGCTGGCAATAATTATAACTTGGCTGTTGCTCTGTGTC CTACTGCGATGCTGACGTTTGGCATGCCAGGTCCAATGGTCCCTCGAGGAAAAACCAATTTGAGAACATC TCGAGTCACTTCGGATATCTGAAAATTGAAGTCTGATTGATGTAGCGCTGGTTGGCTGCTCTTTTTT AAGCAATTAGAGACATGCTCTGAATTGAAGATTTTTGAGTTC
Kinase Domain Sequence:	>SC323474 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation TCCCAAACCTGGACCCATGGAGCTGGCCATCATTACTGTGCCTGTTGCCTCTGTCCATAGCTGCG ATGCTGACAGTATGGGCATGCCAGGTGCGACAGTCTCTACAGGAAGAAAAAGAGACCAATGTGGAGG AACCACTCTGAGTGAATCTGGTAAATGCTGGAAAACTCTGAAAGATCTGATTTATGATGTGACCGC CTCTGGATCTGGCTCTGGTCTACCTCTGTTGGTCAAAGGACAAT
Restriction Sites:	Please inquire
ACCN:	NM_145259
Insert Size:	3500 bp
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:	<ol style="list-style-type: none"> 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_145259.1 , NP_660302.1
RefSeq Size:	3267 bp
RefSeq ORF:	1482 bp

Locus ID:	130399
UniProt ID:	Q8NER5
Cytogenetics:	2q24.1
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Adherens junction, Chronic myeloid leukemia, Colorectal cancer, Endocytosis, MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway
Gene Summary:	<p>ACVR1C is a type I receptor for the TGFB (see MIM 190180) family of signaling molecules. Upon ligand binding, type I receptors phosphorylate cytoplasmic SMAD transcription factors, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription factors (Bondestam et al., 2001 [PubMed 12063393]).[supplied by OMIM, Mar 2008]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.</p>