

Product datasheet for RC225725

Activin A Receptor Type IC (ACVR1C) (NM_001111031) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Activin A Receptor Type IC (ACVR1C) (NM_001111031) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACVR1C
Synonyms:	ACVRLK7; ALK7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC225725 representing NM_001111031 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTAACCAATGAAAAAGAGCAGGTGATCAAATCCTGTGTCTCCCTCCAGAACTGAATGCTCAAGTCT
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CAGATCCCTCGATAGAGGAAATGAGAAAGTTGTTTGTGACCAGAAGTTTCGACCAAGTATCCCAAACCA
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GCCCGCTAACTGCTCTTCGTATTAAGAAGACTATATCTCAACTTGTGTCAAAGAAGACTGCAAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC225725 representing NM_001111031
Red=Cloning site Green=Tags(s)

MLTNGKEQVIKSCVSLPELNAQVFCSSNNVTKTECCFTDFCANNITLHLPTASPNAPKLGPMELAIITV
 PVCLLSIAAMLTVWACQGRQCSYRKKKRPNVEEPLSECNLVNAGKTLKDLIYDVTASGSGSGLPLLVRT
 IARTIVLQEI V GKGRFGEVWHGRWCGEDVAVKIFSSRDERSWFRFAEIIYQTVMLRHENILGFIADNKDN
 GTWTQLWL VSEYHEQGS LYDYLNRNIIVTVAGMIKLALS IASGLAHLHMEIVGTQGKPAIAHRDIKSKNIL
 VKKCECAIADLGLAVKHDSILNTIDIPQNPVKVGTKRYMAPEMLDDTMNVNIFESFKRADIYSVGLVYWE
 IARRCSVGGIVEEYQLPYDMVPSDPSIEEMRKVVCDQKFRPSIPNQWQSCEALVMGRIMRECWYANGA
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

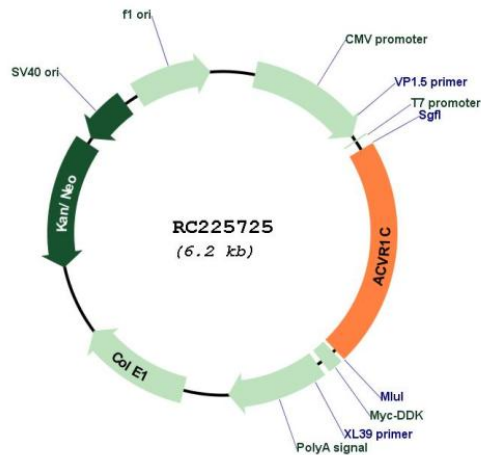
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001111031

ORF Size:	1329 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_001111031.1 , NP_001104501.1
RefSeq ORF:	1332 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
MW:	49.5 kDa
Gene Summary:	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]