

Product datasheet for **RG205434**

Activin A Receptor Type IC (ACVR1C) (NM_145259) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Activin A Receptor Type IC (ACVR1C) (NM_145259) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Activin A Receptor Type IC
Synonyms:	ACVRLK7; ALK7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205434 representing NM_145259
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCCGGGCGCTCTGCTCAGCGCTCCGCCAGGCTCTCCTGCTGCTCGCAGCGCCGCGAGCTCTCGC
 CAGGACTGAAGTGTATGTCTTTTGTGTGATTCTTCAAACCTTACCTGCCAAACAGAAGGAGCATGTTG
 GGCATCAGTCATGCTAACCAATGAAAAAGAGCAGGTGATCAAATCCTGTGTCTCCCTCCAGAACTGAAT
 GCTCAAGTCTTCTGCATAGTTCCAACAATGTTACCAAAACCGAATGCTGCTTCACAGATTTTGAACA
 ACATAACACTGCACCTTCCAACAGCATCACAAATGCCCAAACTTGGACCCATGGAGCTGGCCATCAT
 TATTACTGTGCCTGTTTGCCTCCTGTCCATAGCTGCGATGCTGACAGTATGGGCATGCCAGGTCGACAG
 TGCTCCTACAGGAAGAAAAAGAGACCAATGTGGAGGAACCACTCTGAGTGAATCTGGTAAATGCTG
 GAAAACTCTGAAAGATCTGATTTATGATGTGACCGCCTCTGGATCTGGCTCTGGTCTACCTCTGTTGGT
 TCAAAGGACAATTGCAAGGACGATTGTGCTTCAGGAAATAGTAGGAAAAGGTAGATTTGGTGGGTTGG
 CATGGAAGATGGTGTGGGGAAGATGTGGCTGTGAAAATATTCTCCTCCAGAGATGAAAGATATTGGTTTC
 GTGAGGACGAAATTTACCAGACGGTCATGCTGCGACATGAAAACATCCTTGGTTTCATTGCTGCTGACAA
 CAAAGATAATGGAACCTGGACTCAACTTGGCTGGTATCTGAATATCATGAACAGGGCTCCTTATATGAC
 TATTTGAATAGAAATATAGTGACCATGGCTGGAATGATCAAGCTGGCGCTCTCAATTGCTAGTGGTCTGG
 CACACCTTCATATGGAGATTGTTGGTACACAAGGTAACCTGCTATTGCTCATCGAGACATAAAATCAA
 GAATATCTTAGTAAAAAGTGTGAACTTGTGCCATAGCGGACTTAGGGTTGGCTGTGAAGCATGATTCA
 ATACTGAACACTATCGACATACCTCAGAATCCTAAAGTGGGAACCAAGAGGTATATGGCTCCTGAAATGC
 TTGATGATACAAATGAATGTGAATATCTTTGAGTCTTCAAACGAGCTGACATCTATTCTGTTGGTCTGGT
 TTAGTGGGAAATAGCCCGGAGGTGTTCACTCGGAGGAATTGTTGAGGAGTACCAATTGCTTATTATGAC
 ATGGTGCCTTCAGATCCCTCGATAGAGGAAATGAGAAAGTTGTTTGTGACCAGAAGTTTCGACCAAGTA
 TCCCAAACAGTGGCAAAGTTGTGAAGCACTCCGAGTCATGGGGAGAATAATGCGTGAGTGTGGTATGC
 CAACGGAGCGGCCCGCTAACTGCTCTTCGTATTAAGAAGACTATATCTCAACTTGTGTCAAAGAAGAC
 TGCAAAGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG205434 representing NM_145259
 Red=Cloning site Green=Tags(s)

MTRALCSALRQALLLLAAAAELSPGLKCVLLCDSSNFTCQTEGACWASVMLTNGKEQVIKSCVSLPELN
 AQVFCSSNNVTKTECCFTDFCENNITLHPTASPNAPKLGPMELAIITVPVCLLSIAAMLTVWACQGRQ
 CSYRKKRPNVEEPLSECNLVNAGKTLKDLIYDVTASGSGSGLPLLQRTIARTIVLQEIYVGRFGEVW
 HGRWCGEDVAVKIFSSRDERYWFREAIEYQTVMLRHENILGFIAADNKDNGTWTQLWLVSSEYHEQGS
 LYDYLNRNIIVTMAGMIKLALSASGLAHLHMEIVGTQGKPAIAHRDIKSKNILVKKCETCAIADLGLAVKHDS
 ILNLTIDIPQNPVKVGTKRYMAPEMLDDTMNVNIFESFKRADIYSVGLVYWEIARRCSVGGIVEEYQLPYD
 MYPSPDPSIEEMRKVVCDQKFRPSPINQWQSCEALRVMGRIMRECWYANGAARLTALRIKKTISQLCVKED
 CKA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_145259

ORF Size: 1479 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:

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](#)

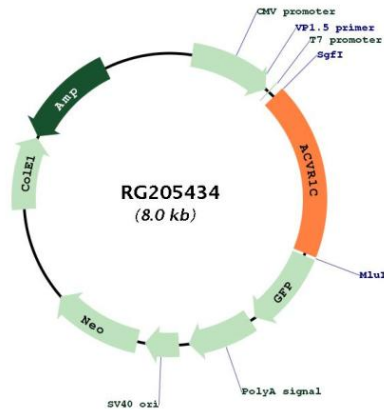
Cytogenetics: 2q24.1

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: 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]

Product images:



Circular map for RG205434