

Product datasheet for **MG225320**

Acvr1 (NM_001110204) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acvr1 (NM_001110204) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acvr1
Synonyms:	ActR-I; ActRIA; Acvr; Acvr1k2; Alk-2; ALK2; Alk8; D330013D15Rik; SKR1; Tsk7L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG225320 representing NM_001110204
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTCGATGGAGTAATGATCCTTCCTGTGCTAATGATGATGGCTTCCCTTCCCGAGTGTGGAAGATG
 AGAAGCCCAAGGTCAACCAAGAACTTTACATGTGTGTGTGAGGGCCTCTCCTGCGGGAACGAGGACCA
 CTGTGAAGGCCAGCAGTGTTTTTCTTCTGAGCATCAACGATGGCTTCCACGTCTACCAGAAGGGCTGC
 TTTCAGGTTTATGAGCAGGGGAAGATGACGTGTAAGACCCCGCCGTACCTGGCCAGGCTGTGGAGTGCT
 GCCAAGGGGACTGGTGTAAACAGGAACATCACGGCCAGCTGCCACTAAAGGGAAGTCTTCCCCGGAAC
 ACAGAATTTCCACCTGGAAGTTGGCCTTATCATCTCTCGGTGGTGTTCAGTATGTCTTTTAGCTTGC
 ATCCTTGGAGTTGCTCTCAGGAAGTTAAGAGACGCAATCAAGAGCGCCTGAACCCAGAGACGTGGAGT
 ATGGTACCATTGAAGGGCTCATCACCACCAATGTGGGAGACAGCACTCTAGCGGAACTACTAGATCACTC
 GTGTACATCAGGAAGTGGCTCCGGTCTTCTTTCTGGTACAGAGAACGGTGGCTCGCCAGATAACCTGT
 TTGGAGTGTGTCGGGAAGGGCCGGTATGGAGAAGTATGGAGGGGAGCTGGCAAGGCGAAAATGTCGCTG
 TGAAGATCTTCTCCTCCCGAGACGAGAAGTCATGGTTCAGGGAGACGGAATTGTACAACACTGTGATGTT
 GAGGCATGAAAATATCTTAGGTTTCATCGCTTCAGACATGACCTCCAGACACTCCAGTACCCAGCTGTGG
 CTCATCACACATTACCATGAAATGGGATCGTTGTATGACTACCTTCAGCTCACTACTCTGGATACGGTTA
 GCTGCCTTCGGATTGACTGTCCATAGCCAGCGGCCTTGCCCATTTGCACATAGAGATATTTGGGACCCA
 AGGGAAGTCCGCCATTGCCATCGAGATCTGAAGAGCAAAAACATCCTGGTGAAGAAGAATGGACAGTGC
 TGCATAGCAGATTTGGGCTGGCAGTATGCATTCAGAGCACAACCAGCTTGATGTGGGAAACAACC
 CCGGTGTGGGACCAAGCGCTACATGGCTCCGGAAGTCTCGATGAAACCATCCAAGTGGATTGCTTTGA
 TTCTTATAAGAGGGTTCGATATTTGGGCCTTTGGCCTTGTCTGTGGGAAGTGGCCAGGCGAATGGTGAGC
 AATGGTATAGTGAAGATTACAAGCCACATTCTATGATGTGGTCCCAATGACCCAAGTTTGAAGATA
 TGAGGAAAGTTGTCTGTGTGGATCAACAGAGGCCAAACATACCTAACAGATGGTTCTCAGACCCGACATT
 AACTTCTCTGGCGAAGCTGATGAAAGAGTGTGGTATCAGAACCCATCCGCAAGACTCACAGCTCTACGT
 ATCAAAAAGACTTTGACCAAAATCGATAATTCCTAGACAAATAAAAACTGACTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225320 representing NM_001110204
 Red=Cloning site Green=Tags(s)

MVDGVMILPVLMMMAFSPSVEDEKPKVNQKLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFHVYQKGC
 FQVYEQGMKMTCKTPPSPGQAVECCQGDWCNRNITAQLPTKGSFPGTQNFHLEVGLIILSVVFAVCLLAC
 ILGVALRKFKRRNQERLNPRDVEYGTIEGLITTNVGDSTLAELLDHSTSGSGSGLPFLVQRTVARQITL
 LECVKGGRYGEVWRGWSQGENVAVKIFSSRDEKSWFRETELYNTVMLRHENILGFIASDMTSRHSSTQLW
 LITHYHEMGSLYDYQLTTLDTVSLRIVLSIASGLAHLHIEIFGTQGKSAIAHRDLKSKNILVKKNGQC
 CIADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVDCFDYSYKRVDIWAFLVWEVARRMVS
 NGIVEDYKPPFYDVVNDPSFEDMRKVVCVDQQRPNIPNRWFSPTLTSKAKLMKECWYQNP SARLTALR
 IKKTLTKIDNSLDKLTDC

TRTRPLE - GFP Tag - V

Restriction Sites:

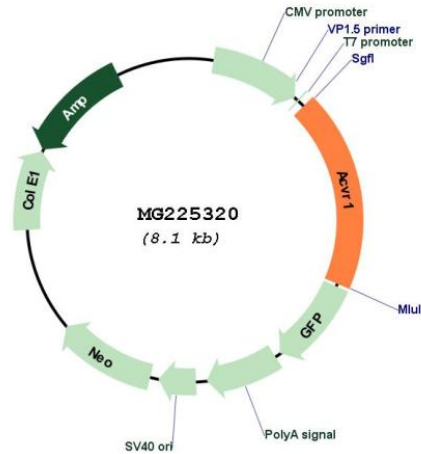
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001110204

ORF Size: 1527 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:	<u>NM_001110204.1</u> , <u>NP_001103674.1</u>
RefSeq Size:	3312 bp
RefSeq ORF:	1530 bp
Locus ID:	11477
UniProt ID:	<u>P37172</u>
Cytogenetics:	2 C1.1
Gene Summary:	On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin. May be involved in left-right pattern formation during embryogenesis. [UniProtKB/Swiss-Prot Function]