

Product datasheet for **MG225322**

Acvr1 (NM_001110205) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acvr1 (NM_001110205) 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:

>MG225322 representing NM_001110205
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGTCGATGGAGTAATGATCCTTCCTGTGCTAATGATGATGGCTTTCCCTTCCCGAGTGTGGAAGATG
 AGAAGCCCAAGGTCAACCAGAACTTTACATGTGTGTGTGAGGGCCTCTCCTGCGGGAACGAGGACCA
 CTGTGAAGGCCAGCAGTGTCTTTCTCTGAGCATCAACGATGGCTTCCACGTCTACCAGAAGGCTGC
 TTTAGGTTTATGAGCAGGGGAAGATGACGTGTAAGACCCCGCCGTACCTGGCCAGGCTGTGGAGTGCT
 GCCAAGGGGACTGGTGTAAACAGGAACATCACGGCCAGCTGCCACTAAAGGGAAGTCTTCCCCGAAC
 ACAGAATTTCCACCTGGAAGTTGGCCTTATCATCTCTCGGTGGTGTTCAGTATGTCTTTAGCTTGC
 ATCCTTGGAGTTGCTCTCAGGAAGTTAAGAGACGCAATCAAGAGCGCCTGAACCCAGAGAGCTGGAGT
 ATGGTACCATTGAAGGGCTCATCACCACCAATGTGGGAGACAGCACTCTAGCGGAACCTAGATCACTC
 GTGTACATCAGGAAGTGGCTCCGGTCTTCTTTCTGGTACAGAGAACGGTGGCTCGCCAGATAACCCTG
 TTGGAGTGTGTCGGGAAGGGCCGGTATGGAGAAGTATGGAGGGGAGCTGGCAAGGCGAAAATGTCGCTG
 TGAAGATCTTCTCTCCCGAGACGAGAAGTCATGGTTCAGGGAGACGGAATTGTACAACACTGTGATGTT
 GAGGCATGAAAATATCTTAGGTTTCATCGCTTCAGACATGACCTCCAGACACTCCAGTACCCAGCTGTGG
 CTCATCACACATTACCATGAAATGGGATCGTGTGTATGACTACCTTCAGCTCACTACTCTGGATACGGTTA
 GCTGCCTTCGGATTGTACTGTCCATAGCCAGCGGCCTTGCCCATTTGCACATAGAGATATTTGGGACCCA
 AGGGAAGTCCGCCATTGCCCATCGAGATCTGAAGAGCAAAACATCTGGTGAAGAAGATGGACAGTGC
 TGCATAGCAGATTTGGGCTGGCAGTCATGCATTCCCAGAGCACAAACAGCTTGATGTGGGAAACAACC
 CCCGTGTGGGACCAAGCGCTACATGGCTCCGGAAGTGTCTGATGAAACCATCCAAGTGGATTGCTTTGA
 TCTTATAAGAGGGTCGATATTTGGGCCTTTGGCCTTGTCTGTGGGAAGTGGCCAGGCGAATGGTGAGC
 AATGGTATAGTGAAGATTACAAGCCACCATTCTATGATGTGGTCCCAATGACCAAGTTTGAAGATA
 TGAGGAAAGTTGTCTGTGTGGATCAACAGAGGCCAAACATACCTAACAGATGGTTCTCAGACCCGACATT
 AACTTCTCTGGCGAAGCTGATGAAAGAGTGTGGTATCAGAACCCATCCGCAAGACTCACAGCTCTACGT
 ATCAAAAAGACTTTGACCAAAATCGATAATTCCTAGACAAATAAAAACTGACTGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG225322 representing NM_001110205
 Red=Cloning site Green=Tags(s)

MVDGVMILPVLMMMAFPSVSEDEKPKVNQKLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFHVYQKGC
 FQVYEQGMKMTCKTPSPGQAVECCQGDWCNRNITAQLPTKGKSFPGTQNFHLEVGLIILSVFVAVCLLAC
 ILGVALRKFKRRNQERLNPRDVEYGTIEGLITTNVGDSTLAELLDHSCTSGSGSGLPFLVQRTVARQITL
 LECVGKGRYGEVWRGSWQGENVAVKIFSSRDEKSWFRETELNTVMLRHENILGFIASDMTSRHSSTQLW
 LITHYHEMGSLYDYQLTTLDTVSCLRIVLSIASGLAHLHIEIFGTQGKSAIAHRDLKSKNILVKKNGQC
 CIADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVDCFDQSYKRVDIWAFGLVLWEVARRMVS
 NGIVEDYKPPFYDVVPNDPSFEDMRKVVCVDQQRPNIPNRWFSPTLTSIAKLMKECWYQNPASRLTALR
 IKKTLTKIDNSLDKLTDC

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001110205

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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001110205.1](#), [NP_001103675.1](#)

RefSeq Size: 2790 bp

RefSeq ORF: 1530 bp

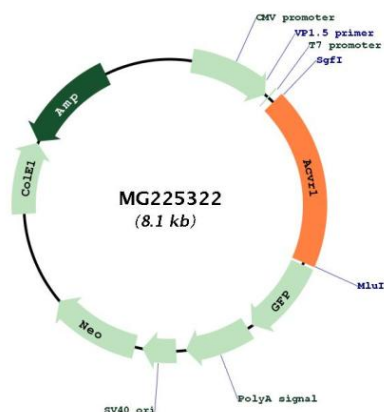
Locus ID: 11477

UniProt ID: [P37172](#)

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]

Product images:



Circular map for MG225322