

Product datasheet for **MG208074**

Acvr11 (NM_009612) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acvr11 (NM_009612) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acvr11
Synonyms:	Acvr1k1; AI115505; AI427544; Alk1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208074 representing NM_009612
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCTTGGGGAGCTTCAGAAGGGCCTTTTGTGCTGTGCGGTGGCCTTGGCCTAACCCAGGGGAGACT
 TGGCGAAGCCTTCCAAGCTGGTGAAGTGAAGTGTGAGAGCCACACTGCAAGAGACCATTCTGCCAGGG
 GTCATGGTGCACAGTGGTCTGGTTCGAGAGCAGGGCAGGCACCCCCAGGTCTATCGGGGCTGCGGGAGC
 CTGAACCAGGAGCTCTGCTTGGGACGTCCACAGAGTTTCTGAACCATCACTGCTGCTATAGATCCTTCT
 GCAACCACAACGTGTCTCTGATGCTGGAGGCCACCCAACTCCTTCGAGGAGCCAGAAGTTGATGCCTA
 TCTGCCTCTGATCCTGGTCTGTGCTGGCCTTGGCGGTCTGGTGGCCCTGGGTGCTCTGGGCTTGTGG
 CGTGTCCGGCGGAGGCAGGAGAAGCAGCGGGATTTGCACAGTGACCTGGGCGAGTCCAGTCTCATCTGA
 AGGCATCTGAACAGGCAGACAGCATGTTGGGGACTTCTGGACAGCGACTGTACTACGGGCAGCGGCTC
 GGGGCTCCCTTCTTGGTGCAGAGGACGGTAGCTCGGCAGGTTGCGCTGGTAGAGTGTGTGGAAAGGGC
 CGATATGGTGAAGTGTGGCGCGGTTTCGTGGCATGGCGAGAGTGTGGCGGTCAAGATTTTCTCCTCAGGAG
 ATGAGCAGTCTGGTTCGGGAGACGGAGATCTACAACACAGTTCTGCTTAGACACGACAACATCCTAGG
 CTTTCATCGCCTCCGACATGACTTCGCGAACTCGAGCACGAGCTGTGGCTCATCACCCACTACCATGAA
 CACGGCTCCCTCTATGACTTTCTGCAGAGGCAGACGCTGGAGCCCGAGTTGGCCCTGAGGCTAGCTGTGT
 CCGCGGCTGCGGCTGGCGCACCTACATGTGGAGATCTTTGGCACTCAAGGCAAACCAGCCATTGCCCA
 TCGTGACCTCAAGAGTCGCAATGTGCTGGTCAAGAGTAACTTGCAGTGTGCATTGCAGACCTGGGACTG
 GCTGTGATGCACTCACAAGCAGCGATTACCTGGATATCGGCAACAACCCCGAGTGGGTACCAAAAGAT
 ACATGGCACCCGAGGTGCTGGATGAGCACATCCGCACAGACTGCTTTGAGTCGTACAAGTGGACAGACAT
 CTGGGCTTTGGCCTAGTGTATGGGAGATCGCCCGGCGGACCATCATCAATGGCATTGTGGAGGATTAC
 AAGCCACCTTTCTATGACATGGTACCCAATGACCCAGTTTTGAGGACATGAAAAAGGTGGTGTGCGTTG
 ACCAGCAGACACCCACCATCCCTAACCGGCTGGCTGCAGATCCGGTCTCTCCGGGCTGGCCAGATGAT
 GAGAGAGTGTGGTACCCCAACCCCTCTGCTCGCCTCACCGCACTGCGCATAAAGAAGACATTGCAGAAG
 CTCAGTACAATCCAGAGAAGCCCAAAGTGATTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208074 representing NM_009612
 Red=Cloning site Green=Tags(s)

MTLGSFRRGLMLLSVALGLTRGDLAKPSKLVNCTCESPHCKRPFQGSWCTVVLVREQGRHPQVYRGGCS
 LNQEELCLGRPTEFLNHHCCYRSFCNHNVSMLLEATQTPSEEPVDAYLPLILGPVLALPVLVALGALGLW
 RVRRRQEKQRDLHSDLGESSLILKASEQADSMLGDFLSDCTTGSGLPFLVQRTVARQVALVECVGKG
 RYGEVWRGSHGESVAVKIFSSRDEQSWFRETEIYNTVLLRHDNILGFIASDMTSRNSSTQLWLITHYHE
 HGSLYDFLQRQTLLEPQLALRLAVSAACGLAHLHVEIFGTQKPAIAHRDLKSRNVLVKSNLQCCIADLGL
 AVMHSQSSDYLDIGNNPRVGTKRYMAPEVLDEHIRTDCFESYKWTDIWAFGLVLWEIARRTIINGIVEDY
 KPPFYDMVPNDPSFEDMKKVVVDQQTPTIPNRLAADPVL SGLAQMRECYWPNPSARLTALRIKKTQK
 LSHNPEKPKVIH

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

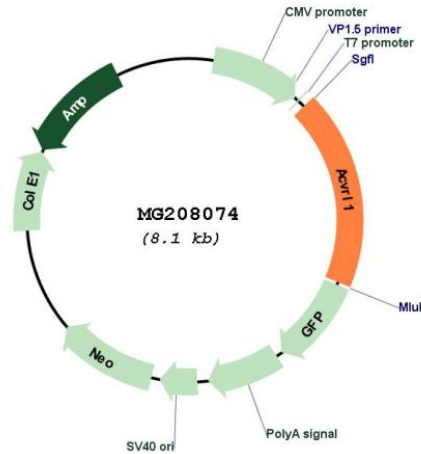
Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -

 PmeI FseI
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

Plasmid Map:


ACCN: NM_009612

ORF Size: 1506 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_009612.2](#), [NP_033742.2](#)

RefSeq Size: 3625 bp

RefSeq ORF: 1509 bp

Locus ID: 11482

UniProt ID: [Q61288](#)

Cytogenetics: 15 F1

Gene Summary: Type I receptor for TGF-beta family ligands BMP9/GDF2 and BMP10 and important regulator of normal blood vessel development. 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. May bind activin as well.[UniProtKB/Swiss-Prot Function]