

## Product datasheet for **MG223468**

### **Ddr1 (NM\_007584) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ddr1 (NM_007584) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ddr1
Synonyms:	6030432F18; AI323681; Cak; CD167a; Nep; PTK3A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG223468 representing NM\_007584  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGACAGGGACCCTCTCATCTCTACTGCTGCTACTCTTGGTGACAATTGGAGATGCTGACATGA  
 AGGGACATTTTGACCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGGACCGCACCATTCTGACAGCGA  
 TATCTCTGTGTCCAGCTCCTGGTCGACTCTACCCTGCCCGCCACAGCAGGCTGGAAAGCAGTGATGGA  
 GATGGGGCTTGGTGCCCTGCAGGGCCTGTGTTCCCAAAGAAGAGGAGTACTTGCAGGTGGACCTTCGTA  
 GGCTACACCTGGTGGCTCTGGTGGGCACCCAGGGCCGCCATGCTGGGGTCTGGGCAAAGAGTTCTCCCG  
 AAGCTATCGTTGCGTTACTCCGAGATGGCCGCCCTGGATGGACTGGAAGGACCGCTGGGACAGGAG  
 GTGATTCGGGTAACGAGGATCCCGGGGAGTAGTCTGAAGGACCTGGGCCCCCATGGTGGCCCGGC  
 TGGTCCGCTTCTACCCAGGGCTGACCGGGTATGAGTGTCTGTCTTCGGGTGGAGCTCTATGGCTGCCT  
 CTGGCGGATGGACTCCTGTATACAGCCCCGCTGGGGCAGACCATGCAGTTATCTGAGGTGATGGTA  
 CATCTCAATGATTCCACTTACGATGGATATACTGCTGGAGGGCTGCAATATGGCGGTCTGGGCCAGCTGG  
 CAGATGGCGTGGTGGCCCTGGATGATTTAGGCAGAGCCAGGAGCTGCGGGTCTGGCCAGGCTATGACTA  
 TGTGGGATGGAGCAATCAGAGCTTCCCCACGGCTACGTGGAGATGGAGTTTGGTTGATCGGTTGAGG  
 ACCTTCCAGACCATGCAGGTCCACTGTAACAACATGCACACTCTGGGAGCCCGCTACCAGGCGGGGTGG  
 AATGCCGGTTTAAAAGGGTCCCAGCATGGCTGGGAAGGAGAGCCTGTCCGCCATGCTCTGGGAGGCAG  
 CCTTGGAGACCCAGAGCCCGGCCATCTCAGTCCCCGGTGGCCACGTGGGCCGCTTCTGCAGTGC  
 AGATTCCTCTTTGAGGTCCTTGGTACTCTTCAGTGAGATCTCTTTCATCTCAGATGTGGTGAACGACT  
 CCTCTGACACCTTCCCACAGCCCTGGTGGCCACCTGGCCCGCTCCCACCACTTCAGCAGCTTGGGA  
 GCTGGAGCCCGGGTCAACAGCCAGTGGCCAAGGCGGAGGGGAGCCCACTGCCATCCTATTGGCTGC  
 CTGGTGGCCATCATCCTGCTGCTTCTCATCATCGCGCTGATGCTCTGGAGGCTGCACTGGCGCCGGC  
 TGCTCAGCAAGGCTGAGCGCCGCTGTTGGAGGAGGAGTACCGTTTACCTTTCTGTCCCTGGGACAC  
 CATCCTCATCAACAACCGCCAGGACCCCGAGAGCCACCCCTTACCAGGAGCCCGGCCTCGGGGACT  
 CCACCCATTCTGCACCTGCGTCCCCAACGGCTCTGCGTTGCTGCTCTCAATCCGGCCTACCCTCC  
 TTCTGGCCACTTACGCCCTCCCCCTCGAGGCCCGGGCCCCCACCCGCTGGGCCAAACCCACCAA  
 CACCCAGGCTGCAGTGGGACTATATGGAGCCGAGAAGCCGGTGCCCGCTTCTACCCACCTCCC  
 CAGAACAGCGTCCCCATTATGCCGAAGCTGACATTGTACCCTGCAGGGCGTCACTGGGGCAACACT  
 ACGCTGTGCTGCACTGCCCCAGGGCGGTGGGGATGGGCCCCAGAGTGGATTTCCCTCGGTCAGG  
 GCTCCGCTTCAAGGAGAAGCTTGGCGAGGGCAATTTGGGGAGGTACACCTGTGTGAAGTAGAGGCCCG  
 CAAGATCTGGTCAGTAGTGACTTCCCTATCAGTGTGCACAAGGGACACCCCTTGGTGGTAGCAGTGAAGA  
 TCCTCCGGCCAGATGCCACAAAATGCCAGGAATGATTTCTGAAGGAGGTAAGATCATGTCACGGCT  
 GAAGGACCCAAACATCATCCGGCTCCTGGGTGTGTGTGTGCAGGATGACCCCTCTGCATGATCACAGAC  
 TACATGGAGAACGGCATCTGAACCAAGTTCCTCAGTCCCCGCCAGCTGGAGAACAAGGCCACTCAGGGGC  
 TCTCTGGGACACAGAGTCTGACCAGGGGCCACAATCAGTACCCTATGCTGTTACACGTGGGGGCCCA  
 GATCGCCTCTGGCATGCGTTATCTCGCCACGCTGAACCTTGTGCATCGGGACCTGGCCACCCGAACTGC  
 TTGGTTGGGAAAATTTACCATCAAAATCGCCGACTTTGGCATGAGCCGGAATCTCTACGCTGGGGATT  
 ATTACCGTGTCCAGGGCCGGCGGTGCTGCCATCAGGTGGATGGCTTGGAGTGCACTTCTCATGGGAA  
 GTTCACAACAGCCAGTGACGTTTGGCCTTCGGAGTGACCCTGTGGGAGGTGCTGATGCTCTGCAGGTCC  
 CAGCCCTTGGGAGCTTACAGATGAGCAGGTTATCGAGAATGCCGGCAGTTCTTACGGGACCAGGGCC  
 GGCAGGTCTACTTGTCCAGGCCACCCGCTGCCACAGACCTGTATGAGCTGATGCTCCGGTGTGGAG  
 CCGGGAGCCCGAGCAGCGCCGCTTCGCCAGCTTTCATCGGTTCTGGCGGATGATGCGCTCAACACG  
 GTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG223468 representing NM\_007584  
 Red=Cloning site Green=Tags(s)

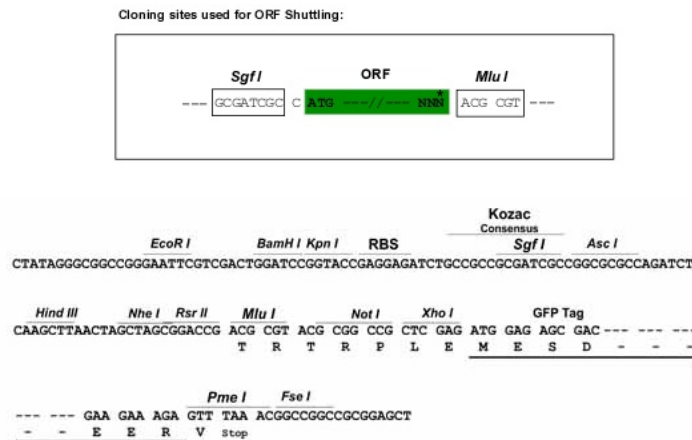
MGTGTLSSLLLLLLLLVTIGDADMKGHFDPKCRYALGMQDRTIPDSISVSSWSWSDSTAARHSRLESSDG  
 DGAWCPAGPVFPKEEYLQVDLRRHLVALVGTQGRHAGGLGKEFSRSYRLRYSRDGRRWMDWDRWGQE  
 VISGNEDPGGVVLKDLGPPMVARLVRFYPRADRVMSVCLRVELYGCLWRDGLLSYAPVGQTMQLSEVMV  
 HLNSTYDGYTAGGLQYGGGLQGLADGVVGLDDFRQSQELRVWPGYDYVGVSNQSFPTGYVEMEFEDRLR  
 TFQTMQVHCNNMHTLGARLPGGVECRFKRGPAMAWEGEPVRHALGGSLGDPRARAI SVPLGGHVGRFLQC  
 RFLFAGPWLLFSEISFISDVVNDSSDTFPPAPWPPGPPPTNFSSELEPRGQQPVAKAEGSPTAILIGC  
 LVAIILLIIALMLWRLHWRLLSKAERRVLEELTVHLSVPGDITLINNRPGPREPPPYQEPFRGT  
 PPHSAPCVNGSALLLSNPAYRLLLATYARPPRPGPPTPAWAKPTNTQACSGDYMEPEKPGAPLLPPP  
 QNSVPHYAEADIVTLQGVGTGNTYAVPALPPGAVGDGPPRVDFPRSRLRFKEKLGEGQFGEVHLCEVEDP  
 QDLVSSDFPISVHKGHPLLVAVKILRPDATKNARNDFLKEVKIMSRLKDPNIIRLLGVCVQDDPLCMITD  
 YMENGLNQFLSARQLENKATQGLSGDTESDQPTISYPMLLVGAQIASGMRYLATLNFVHRDLATRNC  
 LVGENFTIKIADFMSRNL YAGDYRVQGRAVLP IRWMAWECILMGKFTTASDVWAFGVTLWEVLMLCRS  
 QPFGQLTDEQVIENAGEFFRDQGRQVYLSRPPACPQTL YELMLRCWSREPEQRPPFAQLHRFLADDALNT  
 V

TRTRPLE - GFP Tag - V

Chromatograms: [https://cdn.origene.com/chromatograms/ja1234\\_c09.zip](https://cdn.origene.com/chromatograms/ja1234_c09.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



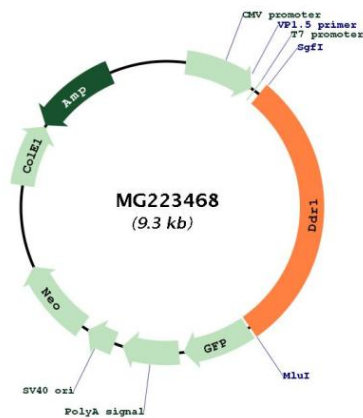
ACCN: NM\_007584

<b>ORF Size:</b>	2733 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_007584.3</a>
<b>RefSeq Size:</b>	3814 bp
<b>RefSeq ORF:</b>	2736 bp
<b>Locus ID:</b>	12305
<b>UniProt ID:</b>	<a href="#">Q03146</a>
<b>Cytogenetics:</b>	17 18.7 cM

**Gene Summary:**

Tyrosine kinase that functions as cell surface receptor for fibrillar collagen and regulates cell attachment to the extracellular matrix, remodeling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation. Collagen binding triggers a signaling pathway that involves SRC and leads to the activation of MAP kinases. Regulates remodeling of the extracellular matrix by up-regulation of the matrix metalloproteinases MMP2, MMP7 and MMP9, and thereby facilitates cell migration and wound healing, but also tumor cell invasion. Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Phosphorylates PTPN11 (By similarity). Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal ear morphology and normal hearing.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG223468