

Product datasheet for **MG222870**

Ddr2 (NM_022563) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddr2 (NM_022563) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ddr2
Synonyms:	AW495251; Ntrkr3; tyro10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222870 representing NM_022563
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATCCCGATTCCAGAATGCCCTGGTCTGCTCCTGCTCTTGCTCATCTGGTTCTGCAAAGCTC
 AGGTTAATCCAGCCATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCACATTCCAGATGAGGACATCAC
 AGCCTCAAGTCAGTGGTCAAGATCCACAGCTGCCAAATATGGGAGGCTGGACTCTGAAGAAGGAGATGGA
 GCCTGGTGTCTGAGATTCCAGTCAACCCGATGACCTGAAGGAATTTTGCAGATTGACTTGCGAACCC
 TACACTTTATCACTCTTGTGGGACCCAGGGCGCCATGCAGGGGTCATGGCATTGAATTTGCACCCAT
 GTACAAGTCAACTACAGTCGGGATGGCAGTCTGCTGGATCTCCTGGCGTAACCGGCATGGGAAGCAGGTG
 CTTGATGGAAACAGTAACCCATTATGATGTCTTCTGAAGGACTGGAGCCACCCATCGTCGCCAGATTTG
 TTCGCCTTATCCAGTCACTGACCCTCCATGAACGTGTGCATGAGGGTTGAGCTTTATGGTTGTGTCTG
 GCTAGATGGCTTGGTATCCTACAATGCTCCAGCTGGACAGCAGTTTGTACTCCCTGGAGGCTCCATCATT
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 GGGATGGCGGAACGAAAGTGCTACCAACGGTTTCATTGAGATCATGTTTGAATTTGACCGAATCAGGAAT
 TTTACTACCATGAAGTCCACTGCAACAATATGTTTGCTAAAGGTGTGAAGATTTTAAAGAGGTCCAGT
 GCTACTTTCGCTCGGAAGCCAGCGAGTGGGAACCCACTGCTGTCTACTTCCCCTGGTCTGGACGATGT
 GAACCCAGTGCCCGTTTGTACGGTGGCCCTCCACCACCGAATGGCCAGTGCCATCAAGTGCCAAATAC
 CATTTTGGCGACAGTGGATGATGTTTACGGAGATCACTTCCAATCAGATGCTGCAATGATAACAAC
 CTGGAGCCCTTCCACCCTCCTATGGCACCCACCACCTATGATCCCATGCTTAAAGTTGATGATAACA
 CACTCGGATCCTGATTGGTTGCTTGGTGGCCATCATCTTCATCCTGCTGGCTATCATCGTATCATCCTG
 TGGAGGAGTCTTGGCAGAAGATGCTAGAAAAGGCTTACGGAGGATGCTGGATGATGAAATGACAGTCA
 GCCTTTCCTGCCAGCGAGTCCAGCATGTTCAATAACAACCGCTCCTCATCACCAAGTGAACAGGAGTC
 CAACTCTACTTATGATCGAATCTTCCCCTTCGCCCTGACTACCAGGAGCCATCCAGACTGATCCGAAAG
 CTTCCAGAGTTTGTCCAGGAGAGGAGGAGTCAAGGTGACAGTGGTGTGTAAGCCGGCCAGCCCAATG
 GACCTGAGGGCGTCCCCACTATGCAGAAGCCGACATAGTGAATCTCCAGGGAGTACAGGTGGCAACAC
 CTACTGTGTGCCTGCTGAACCATGGATCTGCTATCGGGAAAGATGTGGCTGTGGAAGAGTTCCCAGG
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 GCTCCCCATTGCTGGATGTCCTGGGAAAGCATTTGCTGGGCAAAATCACCACGGCAAGTATGATGTGG
 GCCTTTGGGGTACTCTGTGGGAGACTTTCACCTTTTGGCAGGAGCAGCCCTATTTCCAGCTGTCCGATG
 AGCAGGTTATCGAGAACCTGGAGATTTTTCCGAGACCAAGGGAGGAGATCTATCTCCCTCAACCAGC
 CCTTTGCCCGACTCTGTGATAAGCTGATGCTCAGCTGCTGGAGAAGAGAAACCAAGCACCGGCCATCC
 TTCCAGGAAATACACCTCTGCTTCTTCCAGCAAGGAGCCGAG

ACGGTACGGCGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222870 representing NM_022563
Red=Cloning site Green=Tags(s)

MIPIPRMPLVLLLLLILGSAKAQVNPACRYPLGMSGGHIPDEDITASSQWSESTAAKYGRLDSEEGDG
AWCPEIPVQPDDLKEFLQIDLRTLHFITLVGTQGRHAGGHGIEFAPMYKINYSRDGSRWISWRNRHGKQV
LDGNSNPYDVFLKDLLEPPIVARFVRLIPVTDHSMNVCMRVELYGCVWLDGLVSYNAPAGQQFVLPGGSI
YLNSVYDGA VGYSMTEGLGQLTDGVSGLDDFTQTHEYHVWPGYDYVVGWRNESATNGFIEIMFEFDRIRN
FTTMKVHCNMFAGVKIFKEVQCYFRSEASEWEPTAVYFPLVLDVNP SARFVTVPLHHRMASAIKCQY
HFADTWMMFSEITFQSDAAMYNN SGALPTSPMAPTTYDPMLKVDDSNTRILIGCLVAIIFILLAIIVIIL
WRQFWQKMLEKASRRMLDDEMTVSLSLPSESSMFNNR SSSPSEQESNSTYDRIFPLRPDYQEPSRLIRK
LPEFAPGEEESGCSGVV KPAQPNGPEGVPHYAEADIVNLQGV TGGNTYCVPAVTMDLLSGKDVAVEEFPR
KLLAFKEKLGEGQFGEVHLCEVEGMEKFKDKDFALDVSANQPVL VAVKMLRADANKNARNDLKEIKIMS
RLKDPNIIRLLAVCITEDPLCMITEYMENGLNQFLSRHEPLSSCSDATVSYANLKF MATQIASGMKYL
SSLNFVHRDLATRNLVGKNYTIKIADFGMSRNLYSGDYRIQGRAVLP IRWMSWESILLGKFTTASDVW
AFGVTLWETFTFCQEQPYSQLSDEQVIENTGEFFRDQGRQIYLPQPALCPDSVYKMLMLSCWRRETKHRPS
FQEIHLLLLQQGAE

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1619_a02.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_022563

ORF Size: 2562 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_022563.2](#), [NP_072075.2](#)

RefSeq Size: 8306 bp

RefSeq ORF: 2565 bp

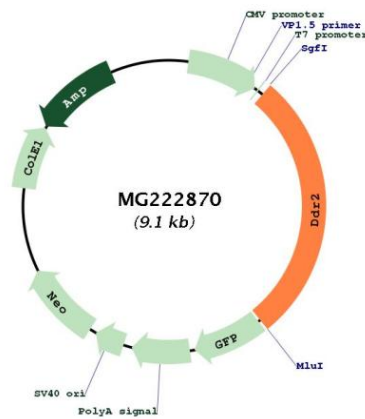
Locus ID: 18214

UniProt ID: [Q62371](#)

Cytogenetics: 1 76.84 cM

Gene Summary: Tyrosine kinase that functions as cell surface receptor for fibrillar collagen and regulates cell differentiation, remodeling of the extracellular matrix, cell migration and cell proliferation. Required for normal bone development. Regulates osteoblast differentiation and chondrocyte maturation via a signaling pathway that involves MAP kinases and leads to the activation of the transcription factor RUNX2. Regulates remodeling of the extracellular matrix by up-regulation of the collagenases MMP1, MMP2 and MMP13, and thereby facilitates cell migration and tumor cell invasion. Promotes fibroblast migration and proliferation, and thereby contributes to cutaneous wound healing.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222870