

Product datasheet for **RG211389**

DDR2 (NM_006182) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDR2 (NM_006182) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DDR2
Synonyms:	MIG20a; NTRKR3; TKT; TYRO10; WRCN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG211389 representing NM_006182
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGATCCTGATTCCAGAATGCTCTTGGTCTGTTCTCTGCTGCTCTATCTTGAGTTCTGCAAAGCTC
AGGTTAATCCAGCTATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCAGATTCCAGATGAGGACATCAC
AGCTTCCAGTCAGTGGTCAGAGTCCACAGCTGCCAAATATGGAAGGCTGGACTCAGAAGAAGGGGATGGA
GCCTGGTGCCTGAGATTCCAGTGAACCTGATGACCTGAAGGAGTTTCTGCAGATTGACTTGCACACCC
TCCATTTTATCACTCTGGTGGGACCCAGGGCGCCATGCAGGAGGTCATGGCATCGAGTTTGCCCCAT
GTACAAGATCAATTACAGTCGGGATGGCACTCGCTGGATCTCTTGGCGGAACCGTCATGGAAACAGGTG
CTGGATGAAAATAGTAACCCCTATGACATTTTCTAAAGGACTGGAGCCGCCATTGTAGCCAGATTTG
TCCGGTTCATTCCAGTCACCGACCCTCCATGAATGTGTGTATGAGAGTGGAGCTTACGGCTGTGTCTG
GCTAGATGGCTTGGTGTCTTACAATGCTCCAGCTGGGCAGCAGTTTGTACTCCCTGGAGGTTCCATCATT
TATCTGAATGATTCTGTCTATGATGGAGCTGTTGGATACAGCATGACAGAAGGGCTAGGCCAATTGACCG
ATGGTGTGTCTGGCCTGGACGATTTACCCAGACCCATGAATACCACGTGTGGCCCGGCTATGACTATGT
GGGCTGGCGGAACGAGAGTGCCACCAATGGCTACATTGAGATCATGTTTGAATTTGACCGCATCAGGAAT
TTCCTACTACCATGAAGTCCACTGCAACAACATGTTTGCTAAAGGTGTGAAGATCTTTAAGGAGGTACAGT
GCTACTCCGCTCTGAAGCCAGTGAAGTGGGAACCTAATGCCATTTCTTCCCCCTGTCTGGATGACGT
CAACCCAGTGCCTCGTTTGTACGGTGCCTCTCCACCACCGAATGGCCAGTCCCATCAAGTGTCAATAC
CATTTTGCAGTACCTGGATGATGTTTCAAGTGAATCAGTACCTTCCAATCAGATGCTGCAATGTACAACA
CTGAAGCCCTGCCACCTCTCTATGGCACCCACAACCTATGATCCAATGCTTAAAGTTGATGACGCA
CACTCGGATCCTGATTGGCTGCTTGGTGGCCATCATCTTTATCCTCCTGGCCATCATTGTATCATCCTG
TGGAGGAGTCTTGGCAGAAAATGCTGGAGAAGGCTTCTCGGAGGATGCTGGATGATGAAATGACAGTCA
GCCTTTCCCTGCCAAGTATTCTAGCATGTTCAACAATAACCGCTCCTCATCACCTAGTGAACAAGGGT
CAACTCGACTTACGATCGCATCTTTCCCTTCCGCTGACTACCAGGAGCCATCCAGGCTGATACGAAAA
CTCCCAGAATTTGCTCCAGGGGAGGAGGAGTCAAGGCTGCAGCGGTGTTGTGAAGCCAGTCCAGCCCAGT
GCCCTGAGGGGGTCCCCACTATGCAGAGGCTGACATAGTGAACCTCCAAGGAGTACAGGAGGCAACAC
ATACTCAGTGCCTGCCGTACCATGGACCTGCTCTCAGGAAAAGATGTGGCTGTGGAGGAGTTCCCAGG
AACTCCTAACTTTCAAAGAGAAGCTGGGAGAAGGACAGTTTGGGAGGTTTCATCTCTGTGAAGTGGAGG
GAATGGAAAAATCAAAGACAAAGATTTTGCCTAGATGTCAGTGCCAACCGCCTGTCTGGTGGCTGT
GAAAATGCTCCGAGCAGATGCCAACAAGATGCCAGGAATGATTTTCTAAGGAGATAAAGATCATGTCT
CGGCTCAAGGACCCAAACATCATCCATCTATTAGCTGTGTGTATCACTGATGACCCTCTCTGTATGATCA
CTGAATACATGGAGAATGGAGATCTCAATCAGTTTCTTTCCCGCCACGAGCCCCCTAATCTTCTCCAG
CGATGTACGCACTGTCAGTTACACCAATCTGAAGTTTATGGCTACCCAAATTGCCTCTGGCATGAAGTAC
CTTTCTCTCTTAATTTTGTTCACCGAGATCTGGCCACACGAACTGTTTAGTGGGTAAGAACTACACAA
TCAAGATAGCTGACTTTGGAATGAGCAGGAACCTGTACAGTGGTACTATTACCGGATCCAGGGCCGGG
AGTGTCCCTATCCGCTGGATGCTTTGGGAGAGTATCTTGTGGCAAGTTCACACTACAGCAAGTGTGTG
TGGGCCTTTGGGTTACTTTGTGGGAGACTTTACCTTTTGTCAAGAACAGCCCTATTCCAGCTGTGAG
ATGAACAGGTTATTGAGAATACTGGAGAGTTCTTCCGAGACCAAGGGAGGAGACTTACCTCCCTCAACC
AGCCATTTGCTCTGACTCTGTGTATAAGCTGATGCTCAGCTGCTGGAGAAGAGATACGAAGAACCGTCCC
TCATTCGAAGAAATCCACCTTCTGCTCCTTCAACAAGGCGACGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG211389 representing NM_006182
Red=Cloning site Green=Tags(s)

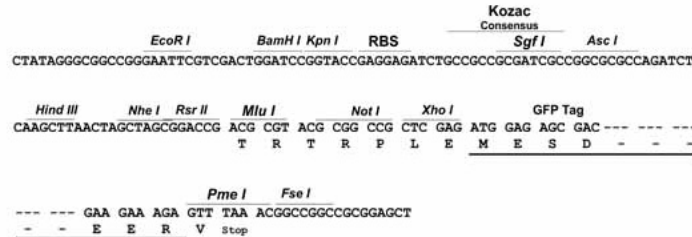
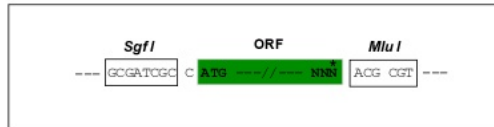
MILIPRMLLVFLLLPISSAKAQNPAICRYPLGMSGGQIPDEDITASSQWSESTAACYGRLDSEEGDG
AWCPEIPVEPDDLKEFLQIDLHLHFITLVGTQGRHAGGHGIEFAPMYKINYSRDGTRWISWRNRHGKQV
LDGNSNPYDIFLKDLEPPIVARFVRFIPVTDHSMNVCMRVELYGCVWLDGLVSYNAPAGQQFVLPGGSI
YLNDVYDYGAVGYSMTEGLGQLTDGVSGLDLDFDTQTHEYHVWPGYDYVGVWRNESATNGYIEIMFEFDRIRN
FTTMKVHCNMFAGVKIFKEVQCYFRSEASEWEPNAISFPLVLDVNP SARFVTVPLHHRMASAIKCQY
HFADTWMMFSEITFQSDAAMYNNSEALPTSPMAPTTYDPMLKVDDSNTRILIGCLVAIIFILLAIIVIIL
WRQFWQKMLEKASRRMLDDEMTVSLSPSDSSMFNNRSSSPSEQGSNSTYDRIFPLRPDYQEPSRLIRK
LPEFAPGEEESGCSGVVQVQPSGPEGVPHYAEADIVNLQGVTTGGNTYSVPAVTMDLLSGKDVAVEEFPR
KLLTFKEKLGEGQFGEVHLCEVEGMEKFKDKDFALDVSANQPVLVAVKMLRADANKNARNDLKEIKIMS
RLKDPNIIHLLAVCITDDPLCMITEYMENGLNQFLSRHEPPNSSSSDVRTVSYTNLKFMATQIASGMKY
LSSLNFVHRDLATRNLVGNKYTIKIADFMSRNLYSGDYRIQGRAVLP IRWMSWESILLGKFTTASDV
WAFGVTLWETFTFCQEQPYSQLSDEQVIENTGEFFRDQGRQTYLPQPAICPDSVYKMLMLSCWRRDTKNRP
SFQEIHLLLLLQQGDE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_006182

ORF Size: 2565 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_006182.2](#), [NP_006173.2](#)

RefSeq Size: 3172 bp

RefSeq ORF: 2568 bp

Locus ID: 4921

UniProt ID: [Q16832](#)

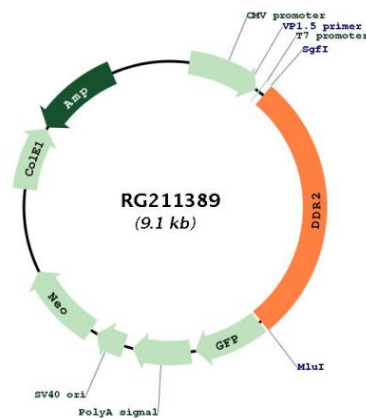
Cytogenetics: 1q23.3

Domains: F5_F8_type_C, pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Gene Summary: This gene encodes a member of the discoidin domain receptor subclass of the receptor tyrosine kinase (RTKs) protein family. RTKs play a key role in the communication of cells with their microenvironment. The encoded protein is a collagen-induced receptor that activates signal transduction pathways involved in cell adhesion, proliferation, and extracellular matrix remodeling. This protein is expressed in numerous cell types and may also be involved in wound repair and regulate tumor growth and invasiveness. Mutations in this gene are the cause of short limb-hand type spondylometaepiphyseal dysplasia. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RG211389