

Product datasheet for **RC402799**

DDR2 (NM_006182) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	DDR2 (NM_006182) Human Mutant ORF Clone
Mutation Description:	R752C
Affected Codon#:	752
Affected NT#:	2254
Nucleotide Mutation:	DDR2 Mutant (R752C), Myc-DDK-tagged ORF clone of Homo sapiens discoidin domain receptor tyrosine kinase 2 (DDR2), transcript variant 2 as transfection-ready DNA
Effect:	Spondylo-me-epiphysel dysplasi, shor limb-hnd ype
Symbol:	DDR2
Synonyms:	MIG20a; NTRKR3; TKT; TYRO10; WRCN
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_006182
ORF Size:	2565 bp
Restriction Sites:	Sgfl-Mlul



[View online »](#)

ORF Nucleotide
Sequence:

>RC402799 representing NM_006182
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCCTGATTCCAGAATGCTCTTGGTGTCTTCTGCTGCTGCCTATCTTGAGTTCTGCAAAAGCTC
AGGTTAATCCAGCTATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCAGATTCCAGATGAGGACATCAC
AGCTTCCAGTCAGTGGTCAGAGTCCACAGCTGCCAAATATGGAAGGCTGGACTCAGAAGAAGGGGATGGA
GCCTGGTGCCTGAGATTCCAGTGAACCTGATGACCTGAAGGAGTTTCTGCAGATTGACTTGCACACCC
TCCATTTTATCACTCTGGTGGGACCCAGGGCGCCATGCAGGAGGTCATGGCATCGAGTTTGCCCCAT
GTACAAGATCAATTACAGTCGGGATGGCACTCGCTGGATCTCTTGGCGGAACCGTCATGGGAAACAGGTG
CTGGATGGAAATAGTAACCCCTATGACATTTTCTAAAGGACTGGAGCCGCCATTGTAGCCAGATTTG
TCCGGTTCATTCCAGTCACCGACCACTCCATGAATGTGTGTATGAGAGTGGAGCTTTACGGCTGTGTCTG
GCTAGATGGCTTGGTGTCTTACAATGCTCCAGCTGGGCAGCAGTTTGTACTCCCTGGAGTTCCATCATT
TATCTGAATGATTCTGTCTATGATGGAGCTGTTGGATACAGCATTGACAGAAGGGCTAGGCCAATTGACCG
ATGGTGTGTCTGGCCTGGACGATTTACCCAGACCCATGAATACCACGTGTGGCCCGGCTATGACTATGT
GGGCTGGCGGAACGAGAGTGCCACCAATGGCTACATTGAGATCATGTTTGAATTTGACCCGCATCAGGAAT
TTCACCTACCATGAAGTCCACTGCAACAACATGTTTGTAAAGGTGTGAAGATCTTTAAGGAGGTACAGT
GCTACTTCCGCTCTGAAGCCAGTGAAGTGGGAACCTAATGCCATTTCTTCCCCCTTGTCTGGATGACGT
CAACCCAGTGCCTCGGTTTGTACGGTGCCTCTCCACCACCGAATGGCCAGTCCCATCAAGTGTCAATAC
CATTTTGCAGATACCTGGATGATGTTTCACTGAGATCACCTTCCAATCAGATGCTGCAATGTACAACAA
CTGAAGCCCTGCCACCTCTCCTATGGCACCCACAACCTATGATCCAATGCTTAAAGTTGACACAA
CACTCGGATCCTGATTGGCTGCTTGGTGGCCATCATCTTTATCCTCCTGGCCATCATTGTCATCATCCTC
TGGAGGAGTTTCTGGCAGAAAATGCTGGAGAAGGCTTCTCGGAGGATGCTGGATGATGAAATGACAGTCA
GCCTTTCCCTGCCAAGTATTCTAGCATGTTCAACAATAACCGCTCCTCATCACCTAGTGAACAAGGGTC
CAACTCGACTTACGATCGCATCTTTCCCTTCCGCCCTGACTACCAGGAGCCATCCAGGCTGATACGAAAA
CTCCCAGAATTTGCTCCAGGGGAGGAGGAGTCAAGGCTGCAGCGGTGTTGTGAAGCCAGTCCAGCCCAGT
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ATACTCAGTGCCTGCCGTACCATGGACCTGCTCTCAGGAAAAGATGTGGCTGTGGAGGAGTTCCCCAGG
AACTCCTAACTTTCAAAGAGAAGCTGGGAGAAGGACAGTTTGGGGAGGTTTCATCTCTGTGAAGTGGAGG
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GAAAATGCTCCGAGCAGATGCCAACAAGAAATGCCAGGAATGATTTTCTAAGGAGATAAAGATCATGTCT
CGGCTCAAGGACCCAAACATCATCCATCTATTAGCTGTGTGTATCACTGATGACCCTCTCTGTATGATCA
CTGAATACATGGAGAATGGAGATCTCAATCAGTTTCTTTCCCGCCACGAGCCCCCTAATTCTTCTCCAG
CGATGTACGCACTGTCAGTTACACCAATCTGAAGTTTATGGCTACCCAAATTGCCTCTGGCATGAAGTAC
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TCAAGATAGCTGACTTTGGAATGAGCAGGAACCTGTACAGTGGTACTATTACCGGATCCAGGGCCGGGC
AGTGCTCCCTATCTGCTGGATGTCTTGGGAGAGTATCTTGTGGCAAGTTCACTACAGCAAGTGTATGTG
TGGGCCCTTGGGTTACTTTGTGGGAGACTTTCACCTTTTGTCAAGAACAGCCCTATTCCAGCTGTGAG
ATGAACAGGTTATTGAGAATACTGGAGAGTTCTTCCGAGACCAAGGGAGGCAGACTTACCTCCCTCAACC
AGCCATTTGCTGACTCTGTGTATAAGCTGATGCTCAGCTGCTGGAGAAGAGATACGAAGAACCGTCCC
TCATCCAAGAAATCCACCTTCTGCTCTTCAACAAGGCGACGAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence: >RC402799 representing NM_006182
 Red=Cloning site Green=Tags(s)

MILIPRMLLVLFLLLPILSSAKAVNPAICRYPLGMSGGQIPDEDITASSQWSESTAACYGRDLDSSEEDG
 AWCPEIPVEPDDLKEFLQIDLHLHFITLVGTQGRHAGGHGIEFAPMYKINYSRDGTRWISWRNRHGKQV
 LDGNSNPYDIFLKDLEPPIVARFVRFIPVTDHSMNVCMRVELYGCWLDGLVSYNAPAGQQFVLPGGSI
 YLNDSVYDGAAGVYMTGLGQLTDGVSGLDDFTQTHEYHVWPGYDYVWWRNESATNGYIEIMFEFDRIRN
 FTTMKVHCNMFAGVKIFKEVQCYFRSEASEWEPNAISFPLVDDVNP SARFVTYPLHHRMASAIKCQY
 HFADTWMFSEITFQSDAAMYNNSEALPTSPMAPTTYDPMLKVDDSNTRILIGCLVAIIFILLAIIVIIL
 WRQFWQKMLEKASRRMLDDEMTVSLSPSDSSMFNNRSPSPSEQGSNSTYDRIFLRPDYQEPSRLIRK
 LPEFAPGEEEGSCSGVVKPVQPSGPEGVPHYAEADIVNLQGVTTGNTYSVPAVTMDLLSGKDVAVEEFPR
 KLLTFKEKLGEGQFGEVHLCEVEGMEKFKDKDFALDVSANQPVLVAVKMLRADANKNARNDLKEIKIMS
 RLKDPNIHLLAVCITDDPLCMITEYMENGLNQFLSRHEPPNSSSDVRTVSYTNLKFMATQIASGMKY
 LSSLNFVHRDLATRNCLVGKNTYIKIADFGMSRNLVSGDYRYIQGRAVLPICWMSWESILLGKFTTASDV
 WAFGVTLWETFTFCQEQPYSQLSDEQVIENTGEFFRDQGRQTYLPQPAICPDSVYKMLMLSCWRRDTKNRP
 SFQEIHLLLLLQQGDE

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



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).

RefSeq:

[NP_006173](#)

RefSeq Size: 2565 bp

RefSeq ORF: 2568 bp

Locus ID: 4921

Cytogenetics: 1q23.3

Domains: F5_F8_type_C, pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

MW: 94.1 kDa

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 spondylometaphyseal dysplasia. [provided by RefSeq, Aug 2017]