

## Product datasheet for **RC600062**

### DDR2 (NM\_001014796) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                        |
| Product Name:             | DDR2 (NM_001014796) Human Tagged ORF Clone |
| Tag:                      | DDK-His                                    |
| Symbol:                   | DDR2                                       |
| Synonyms:                 | MIG20a; NTRKR3; TKT; TYRO10; WRCN          |
| Mammalian Cell Selection: | None                                       |
| Vector:                   | pCMV6-XL5-DDK-His (PS100068)               |
| E. coli Selection:        | Ampicillin (100 ug/mL)                     |



[View online »](#)

**ORF Nucleotide Sequence:**

>RC600062 representing leader sequence plus the extracellular domain region of NM\_001014796  
 Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCTGGTACCGAGGAGATCCGCCGCCG  
 CGATCGCC

ATGATCTGATTCCAGAATGCTCTTGGTGTCTTCTGCTGCTGCCTATCTTGAGTTCTGCAAAAGCTC  
 AGGTTAATCCAGCTATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCAGATTCCAGATGAGGACATCAC  
 AGCTTCCAGTCAGTGGTCAAGTCCACAGCTGCCAAATATGGAAGGCTGGACTCAGAAGAAGGGGATGGA  
 GCCTGGTGCCTGAGATTCCAGTGAACCTGATGACCTGAAGGAGTTTCTGCAGATTGACTTGACACCC  
 TCCATTTTATCACTCTGGTGGGACCCAGGGCGCCATGCAGGAGGTATGGCATCGAGTTTGCCCCAT  
 GTACAAGATCAATTACAGTCGGGATGGCACTCGCTGGATCTCTTGGCGGAACCGTATGGAAACAGGTG  
 CTGGATGGAATAGTAACCCCTATGACATTTTCTAAAGGACTTGAGCCGCCATTGTAGCCAGATTTG  
 TCCGGTTCATTCCAGTCACCGACCACTCCATGAATGTGTGTATGAGAGTGGAGCTTTACGGCTGTGTCTG  
 GCTAGATGGCTTGGTGTCTTACAATGCTCCAGCTGGGCAGCAGTTTGTACTCCCTGGAGGTTCCATCATT  
 TATCTGAATGATTCTGTCTATGATGGAGCTGTTGGATACAGCATGACAGAAGGGCTAGGCCAATTGACCG  
 ATGGTGTGTCTGGCTGGACGATTTACCCAGACCCATGAATACCACGTGTGGCCCGCTATGACTATGT  
 GGGCTGGCGGAACGAGAGTGCCACCAATGGCTACATTGAGATCATGTTTGAATTTGACCGCATCAGGAAT  
 TTCCTACCATGAAGGTCCACTGCAACAACATGTTTGCTAAAGGTGTGAAGATCTTTAAGGAGGTACAGT  
 GCTACTCCGCTCTGAAGCCAGTGAAGGAACTAATGCCATTTCTTCCCCTTGTCTGGATGACGT  
 CAACCCAGTGTCTGGTTTGTACGGTGCCTCTCCACCACCGAATGGCCAGTCCATCAAGTGTCAATAC  
 CATTTTGCAGATACCTGGATGATGTTTCAAGTGAATGATGATGATGATGATGATGATGATGATGATGATGAT  
 CTGAAGCCCTGCCACCTCTCTATGGCACCCACAACCTATGATCCAATGCTTAAAGTTGATGACAGCAA  
 CACTCGG

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC  
 TGGTACCGATATCAAGCTTGTGACTCTAGA

**Protein Sequence:**

>RC600062 representing signal peptide plus the extracellular domain region of NM\_001014796  
 Red=Cloning sites Green= DDK and 6XHIS Tags

MILIPRMLLVLFLLLPILSSAKAQVNPICRYPLGMSGGQIPDEDITASSQWSESTAAKYGRLDSEEGDG  
 AWCPEIPVEPDDLKEFLQIDLHLHFITLVGTQGRHAGGHGIEFAPMYKINYSRDGTRWISWRNRHGKQV  
 LDGNSNPYDIFLKDLEPPIVARFVRFIPVTDHSMNVCMRVELYGCVWLDGLVSYNAPAGQQFVLPGGSI  
 IYLNDSVYDGAAGVSMTEGLGQLTDGVSGLDDFTQTHEYHVWPGDYVVGWRNESATNGYIEIMFEFDRIRN  
 FTTMKVHCNMFAGVKIFKEVQCYFRSEASEWEPNAISFPLVLDVNP SARFVTPLHHRMASAIKCQY  
 HFADTWMMFSEITFQSDAAMYNSEALPTSPMAPTTYDPMLKVDDSNTR

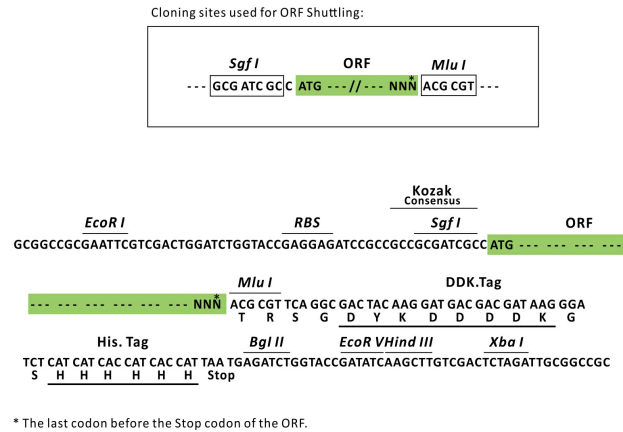
TRSGTRSGDYKDDDDKGSHHHHHH

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8117\\_h01.zip](https://cdn.origene.com/chromatograms/mk8117_h01.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001014796

**ORF Size:** 1197 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 extra cellular domain of the protein 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\\_001014796.1](#), [NP\\_001014796.1](#)

**RefSeq Size:** 3252 bp

**RefSeq ORF:** 2568 bp

**Locus ID:** 4921

**UniProt ID:** [Q16832](#)

**Cytogenetics:** 1q23.3

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**MW:** 45.1 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]