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Product datasheet for RC211389

DDR2 (NM_006182) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDR2 (NM_006182) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDR2
Synonyms:	MIG20a; NTRKR3; TKT; TYRO10; WRCN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC211389 representing NM_006182
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATCCTGATTCCCAGAATGCTCTTGGTGCTGTTCCTGCTGCTGCCTATCTTGAGTTCTGCAAAAGCTC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211389 representing NM_006182
Red=Cloning site Green=Tags(s)

MILIPRMLLVLFLLLPILSSAKAQVNPAICRYPLGMSGGQIPDEDITASSQWSESTAAKYGRLDSEEGDG
AWCPEIPVEPDDLKEFLQIDLHTLHFITLVGTQGRHAGGHGIEFAPMYKINYSRDGTRWISWRNRHGKQV
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FTTMKVHCNNMFAKGVKIFKEVQCYFRSEASEWEPNAISFPLVLDDVNPSARFVTVPLHHRMASAIKCQY
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LSSLNFVHRDLATRNCLVGKNYTIKIADFGMSRNLYSGDYYRIQGRAVLPIRWMSWESILLGKFTTASDV
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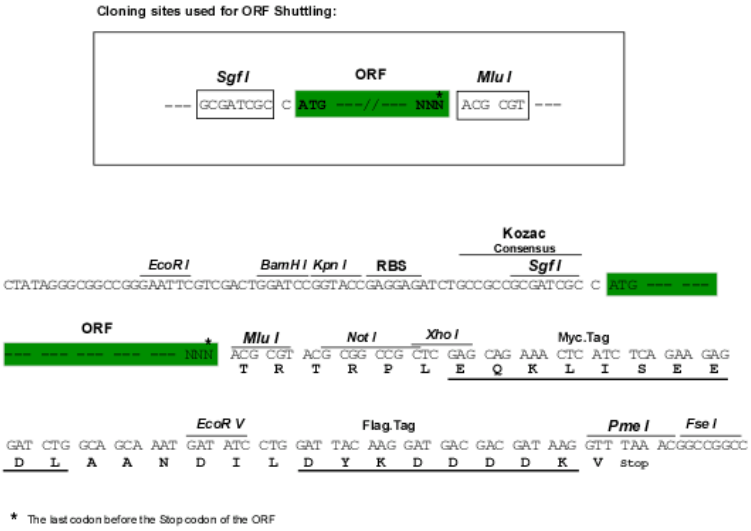
SFQEIHLLLLQQGDE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6263_h03.zip

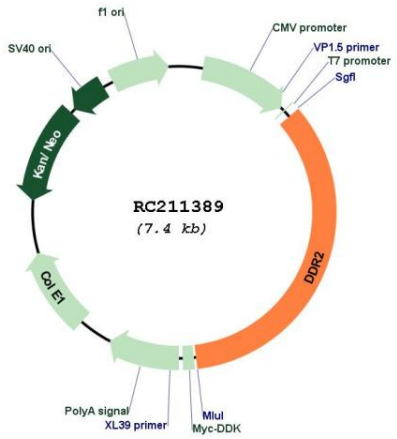
Restriction Sites: SgfI-MluI

Cloning Scheme:

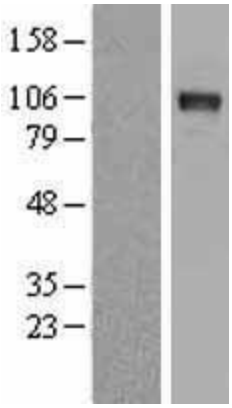


ACCN:	NM_006182
ORF Size:	2565 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_006182.4
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
MW:	96.74 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 alos 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]

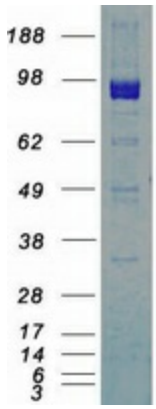
Product images:



Circular map for RC211389



Western blot validation of overexpression lysate (Cat# [LY416820]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211389 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDR2 protein (Cat# [TP311389]). The protein was produced from HEK293T cells transfected with DDR2 cDNA clone (Cat# RC211389) using MegaTran 2.0 (Cat# [TT210002]).