

Product datasheet for **RC600060**

ROR2 (NM_004560) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ROR2 (NM_004560) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	ROR2
Synonyms:	BDB; BDB1; NTRKR2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RC600060 representing leader sequence plus the extracellular domain region of NM_004560

Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCTGGTACCGAGGAGATCCGCCGCCG
CGATCGCC

ATGGCCCCGGGCTCGGGCTCCCGCGGCCGCGTGTGTGCATCCCGGCGCTCTGGGCGGCCGCCGCGC
TTCTGCTCTCAGTGTCCCGACTTCAGGTGAAGTGGAGTTCTGGATCCGAACGACCCCTTATAGGACCCCT
TGATGGGCAGGACGGCCGATTCCAACCTGAAAGGTTACTTTCTGAATTTCTGGAGCCAGTAAACAAT
ATCACCATTGTCCAAGGCCAGACGGCAATTCTGCACTGCAAGGTGGCAGGAAACCCACCCCTAACGTGC
GGTGGCTAAAGAATGATGCCCGGTGGTGCAGGAGCCGCGGGGATCATCATCCGGAAGACAGAATATGG
TTCAGACTGCGAATCCAGGACCTGGACACGACAGACTGGCTACTACCAGTGGTGGCCACCAACGGG
ATGAAGACCATTACGCCACTGGCGTCTGTTTGTGCGGTGGTCCAACGCACAGCCAAATCATAACT
TTCAGGATGATTACCACGAGGATGGTTCGCCAGCCTTACCGGGGAATTGCCTGTGCACGCTTCATTGG
CAACCGGACCATTATGTGGACTCGCTTCAGATGCAGGGGAGATTGAAAACCGAATCACAGCGGCCTTC
ACCATGATCGGCACGTCTACGCACCTGTGCGACCAGTGTCTCACAGTTCGCCATCCCATCCTTCTGCCACT
TCGTGTTTCTCTGTGCGACGCGCTCCCGGACACCCAAGCCGCGTGAGCTGTGCCGCGACGAGTGCGA
GGTGTGGAGAGCGACCTGTGCCCCAGGAGTACACCATCGCCCGCTCCAACCCGCTCATCTCATGCGG
CTTCAGCTGCCAAGTGTGAGGCGCTGCCATGCCTGAGAGCCCCGACGCTGCCAACTGCATGCGCATTG
GCATCCAGCCGAGAGGCTGGGCCGCTACCATCAGTGTATAACGGCTCAGGCATGGATTACAGAGGAAC
GGCAAGCACCACCAAGTCAGGCCACAGTGCCAGCCGTGGGCCCTGCAGCACCCACAGCCACCACCTG
TCCAGCACAGACTTCCCTGAGCTTGGAGGGGGCACGCCTACTGCCGGAACCCCGAGGCCAGATGGAGG
GCCCTGGTGTTCACGAGAATAAAAACGTACGCATGGAACGTGTGTGACGTACCCTCGTGTAGTCCCCG
AGACAGCAGCAAGATGGG

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC
TGGTACCGATATCAAGCTTGTGACTCTAGA

Protein Sequence:

>RC600060 representing signal peptide plus the extracellular domain region of NM_004560

Red=Cloning sites Green= DDK and 6XHIS Tags

MARGSALPRRPLLCIPAVWAAAALLLSVSRTSGEVEVLDPNPLGPLDGQDGIPTLKGYFLNFLEPVNN
ITIVQGQTAILHCKVAGNPPNVRWLKNDAPVVQEPRRIIRKTEYGSRLRIQDLDTDTGYYQCVATNG
MKTITATGVLFVRLGPTHSPNHNFDYHEDGFCQPYRGIACARFIGNRTIYVDSLQMQGEIENRITAAF
TMIGTSTHLSQCSQFAIPSFCHFVPLCDARSRTPKPRELCRDECEVLESIDLCRQEYTIARSNPLILMR
LQLPKCEALPMPESPDAANCMRIGIPAERLGRYHQCYNGSGMDYRGTAATTKSGHQCPWALQHPHSHHL
SSTDFPELGGGHAYCRNPGGQMEGPWCFTQKNVRELMELCDVPSCSPRDSKMG

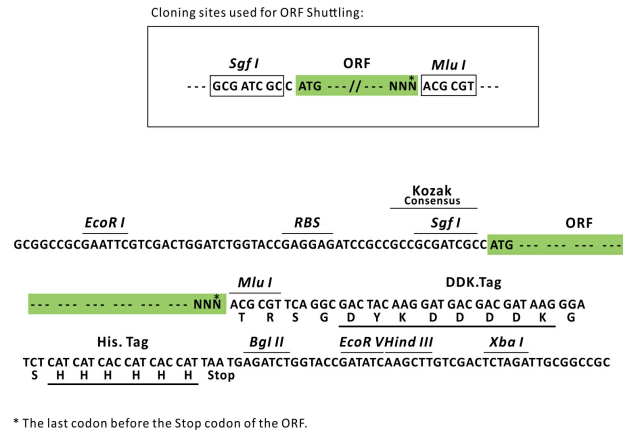
TRSGTRSGDYKDDDDKGSHHHHHH

Chromatograms:

https://cdn.origene.com/chromatograms/mk8117_g11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_004560

ORF Size: 1209 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_004560.3](#), [NP_004551.2](#)

RefSeq Size: 4099 bp

RefSeq ORF: 2832 bp

Locus ID: 4920

UniProt ID: [Q01974](#)

Cytogenetics: 9q22.31

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

MW: 44.7 kDa

Gene Summary: The protein encoded by this gene is a receptor protein tyrosine kinase and type I transmembrane protein that belongs to the ROR subfamily of cell surface receptors. The protein may be involved in the early formation of the chondrocytes and may be required for cartilage and growth plate development. Mutations in this gene can cause brachydactyly type B, a skeletal disorder characterized by hypoplasia/aplasia of distal phalanges and nails. In addition, mutations in this gene can cause the autosomal recessive form of Robinow syndrome, which is characterized by skeletal dysplasia with generalized limb bone shortening, segmental defects of the spine, brachydactyly, and a dysmorphic facial appearance. [provided by RefSeq, Jul 2008]