

Product datasheet for SC117279

ROR2 (NM_004560) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ROR2 (NM_004560) Human Untagged Clone
Tag: Tag Free
Symbol: ROR2
Synonyms: BDB; BDB1; NTRKR2
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_004560 edited
TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACCAAGGTCCTCGAAGTGG
ACCCGTTTGCGAAGCGCCAGGGAGAAGGAGGAGCGGACGCATCGTAGAAAGGGTGGTGG
CGCCCGACCCCGCGCCCGGCCGGAAGCTCTGAGGGCTTCCCGGCCCCACTGCCTGCGG
CATGGCCCGGGGCTCGGCGCTCCCGCGGCGCCGCTGCTGTGCATCCCGGCCGTCTGGGC
GGCCGCGCGCTTCTGCTCTCAGTGTCCCGACTTCAGGTGAAGTGGAGTTCTGGATCC
GAACGACCCTTTAGGACCCTTGATGGGCAGGACGGCCGATTCCAACCTGAAAGGTTA
CTTTCTGAATTTCTGGAGCCAGTAAACAATATCACCATTGTCCAAGGCCAGACGGCAAT
TCTGCACTGCAAGGTGGCAGGAAACCCACCCCTAACGTGCGGTGGCTAAAGAATGATGC
CCCGTGGTGCAGGAGCCGCGGGATCATCATCCGGAAGACAGAATATGGTTCAGACT
GCGAATCCAGGACCTGGACACGACAGACTGGCTACTACAGTGCCTGGCCACCAACGG
GATGAAGACCATTACCGCACTGGCGTCTGTTTGTGCGCTGGGTCCAACGCACAGCCC
AAATCATAAATTTTCAGGATGATTACCACGAGGATGGGTTCTGCCAGCCTTACCGGGGAAT
TGCTGTGCACGCTTTCATTGGCAACCGGACATTTATGTGGACTCGCTTCAGATGCAGGG
GGAGATTGAAAACCGAATCACAGCGGCCTTACCATGATCGGCACGTCTACGCACCTGTC
GGACCAGTGCTCACAGTTCGCCATCCCATCCTTCTGCCACTTCGTGTTTCTCTGTGCGA
CGCGCGCTCCCGGCCACCAAGCCGCGTGAGCTGTGCCGCGACGAGTGCAGGTGCTGGA
GAGCGACTGTGCCGCCAGGAGTACACCATCGCCGCTCCAACCCGCTCATCCTCATGCG
GCTTCAGCTGCCAAGTGTGAGGCGCTGCCATGCCTGAGAGCCCGACGCTGCCAAGTGC
CATGCGCATTGGCATCCCAGCCGAGAGGCTGGCCGCTACCATCAGTGCTATAACCGCTC
AGGCATGGATTACAGAGGAACGGCAAGCACCAAGTACAGGCCACCAAGTGCAGCCAGTGC
GGCCCTGCAGCACCCACAGCCACCACCTGTCCAGCACAGACTTCCCTGAGCTTGAGG
GGGGCACGCCTACTGCCGGAACCCCGAGGCCAGATGGAGGGCCCTGGTGCTTTACGCA
GAATAAAAACGTACGCATGGAACGTGTGACGTACCCTCGTGTAGTCCCCGAGACAGCAG
CAAGATGGGGATTCTGTACATCTTGGTCCCAGCATCGCAATCCACTGGTCATCGCTTG
CCTTTTCTTCTGGTTTGCATGTGCCGGAATAAGCAGAAGGCATCTGCGTCCACACCGCA
GCGGCGACAGCTGATGGCTCGCCAGCCAAGACATGGAATGCCCTCATTAAACAGCA



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CAAACAGGCCAAACTCAAAGAGATCAGCCTGTCTGCGGTGAGGTTTCATGGAGGAGCTGGG
 AGAGGACCGGTTTGGGAAAGTCTACAAAGGTCACCTGTTGCGCCCTGCCCGGGGGAGCA
 GACCCAGGCTGTGGCCATCAAAACGCTGAAGGACAAAGCGGAGGGGCCCTGCGGGAGGA
 GTTCCGGCATGAGGCTATGCTGCGAGCACGGCTGCAACACCCCAACGTCGTCTGCCTGT
 GGGCGTGGTGACCAAGGACCAGCCCTGAGCATGATCTTCAGCTACTGTTGCGACGGCGA
 CCTCCACGAATTCCTGGTCATGCGCTCGCCGACTCGGACGTGGGACGACCCGATGATGA
 CCGCACGGTGAAGTCCGCCCTGGAGCCCGGACTTCGTGCACCTTGTGGCACAGATCGC
 GCGGGGATGGAGTACCTATCCAGCCACCACGTGGTTTACAAGGACCTGGCCACCCGCAA
 TGTGCTAGTGTACGACAAGCTGAACGTGAAGATCTCAGACTTGGGCCTTCCGAGAGGT
 GTATGCCGCCGATTACTACAAGCTGCTGGGGAACCTGCTGCTGCCTATCCGCTGGATGGC
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 GGACATCCACAGCCGGCTCCGAGCCTGGGGCAACCTTTCCAACACTACAACAGCTCGGCGCA
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 CTCACACCACAGTGGCAGTGGCTCCACCAGCACAGGCTACGTACCACGGCCCCCTCAA
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 CCCAGAAGATGGGGCCCAGAGCACCGTGCAGGAAGCAGAGGAGGAGGAAGGCTCTGT
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 CACAGGGACCTCAGTCACCTTTGAGAAGACACCATACTCAGCAATCACAAGAGCCCGCCG
 GCCAGTGGGCTTGTTCAGACTGGGTGAGGTGGAGCCCTGCTCCTCTGTCTCTGAC
 ACAGCTGCCCTGCCTAGGAGCACCCAAGCCAGGCAGGGGGTCTGGCAGCACGGCGTCTG
 GGGAGCAGGACACATGGTCATCCCCAGGGCTGTATACATTGATTCTGGTGGTAGACTGGT
 AGTGAGCAGCAAATGCCTTTCAAGAAAATAGGTGGCAGTTCCTCCATGTCATATATGG
 AGTGAATATTTCAAACGTTGGGAATAAGGGCCTGCAAAAGGCAGCGAGGAGGCACCTCG
 GGTCTTGAGGTTCTGACAACCGATCTGGTCTGTTGGTTTGAGGATGAAGGGGCTCCATT
 TCTGCTGCCTCCCTGCTGAGAATATTCTCCCTTAGCAGCCAAAGATTGCTGGAACGGA
 GGCTGCCCTCTGCTGCCTGTTGGGGTCGGAAGACAAGGGGCTTCTGAAATGGGAGTTCCT
 GAGATACAACAAAATGTGTGCCTTCAAAGAAACTGACAGCTTTGTATTTGGTGAATGGT
 TTTAATTATACTCCATGTGTATTTTGCCCACTTTTTTGGGAATCAAGGGAAAGTGT
 CTTGGGTTTGGAAATGTTACAGAGGAAGCAGTATTGTACAGAACACGGTATTGTTATTTTG
 TTAAGAATCATGTACAGAGCTTAAATGTAATTTATATGTTTTTAATATGCCATTTTCATT
 GAAGTATTTTGGTCTTAAAAAAAAAAAAAAAAAACTCGACTACTAGATTGCGGCCCGGT

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004560 unedited
 GTCATATATTTGTATACGACTCATATAGGGCGGCCGCAATTCGGCACCAGGGTCCCTCGA
 AGTGGACCCGTTTGCGAAGCGCCAGGGAGAAGGAGGAGCGGACGCATCGTAGAAAGGGGT
 GGTGGCGCCCGACCCCGCCCGCCGCGCCGAAAGCTCTGAGGGCTTCCCGGCCCCACTGCC
 TGCGGCATGGCCCGGGCTCGGCGCTCCCGCGCGGCCGCTGTGTGCATCCCGGCCGTC
 TGGCGGCCCGCCGCTTCTGCTCTCAGTGTCCCGACTTCAGGTGAAGTGGAGTTCTG
 GATCCGAACGACCCTTTAGGACCCTTGATGGGACGACGCGCCGATTCCAACCTTGAAA
 GGTACTTTCTGAATTTCTGGAGCCAGTAAACAATATACCATTGTCCAAGGCCAGACG
 GCAATTCTGCACTGCAAGGTGGCAGGAAACCCACCCCTAACGTGCGGTGGCTAAAGAAT
 GATGCCCCGGTGGTGCAGGAGCCGCGCGGATCATCATCCGGAAGACAGAATATGGTTCA
 CGACTGCGAATCCAGGACCTGGACACGACAGACTGGCTACTACCAGTGCCTGGCCACC
 AACGGGATGAAGACCATTACCGCCACTGGCGTCTGTTTGTGCGGCTGGGTCCAACGCAC
 AGCCANATCATAACTTTAGGATGATTACCACGAGGATGGGTTCTGCCAGCCTTACCGG
 NGAATTGCCTGTGCACGCTTCATTGGCAACCGGACCATTATGTGGACTCGCTTCAGATG
 CAGGGGGAGATTAAAACCGATCACAGCGCCTTACCATGATCGGCACGTCTACGCACC
 TGTCGGACCAGTCTCACAGTTCGCCATCCCATCCTTCTGCCACTTCGTGTTTCTCTGT
 CGGACGCGCGGCTCCCGGCACCAAGCCCCGTGAGCTGTGCCCGACCAGT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004560 unedited
 CTTGGCTTGGCGATGGCAACTTCCGGGCGGGGAGGCACTGGGGNGGGGTACAGGGCAT
 GCCACGCCGGTATCTGTTTACAGGAAAACAGCTATGACCGCGGCCAATCTAGAGTCGAG
 TTTTTTTTTTTTTTTTTTAAAGACAAAATACTTCAATGAAAATGGCATATTA AAAACATA
 TAAATTACATTTAAGCTCTGTACATGATTCTTAACAAAATAACAATACCGTGTCTGTA
 CAATACTGCTTCTCTGAACATTCCAAACCAAGAAACACTTTCCTTGAATTC CAAAA
 AAAGTGGGCAAAATACACATGGAGTATAATTA AACCATTTACCAAATACAAAGCTGTC
 AGTTTCTTTGAAGGCACACATTTTGTGTATCTCAGGAACTCCCATTT CAGAAGCCCTT
 GTCTTCCGACCCCAACAGGCAGTATAGGGCAGCCTCCGTTCCAGCGAATCTTTGGTGTCT
 AATGGGAGAATGTTCTTAGCCGGGAGGTATAGAAATGGGCCCTTTATTCGTGGGCTGA
 AGGCCCGAGGTATTGACTCGTCCACTGTT CAGCATGGTGTCTGATTGGCCTCCTTTATCAT
 ACCATGTTTCTCTTTTGCCTGAATTTGTTACATCCCCGGTGAACAGTGTGGTTGTGTC
 GAATTGTTAATAAGATGGCAGTCATTTTATCGTGCGAGTGTGATCGAACCGTTGAATT
 TAGCTCTACTTTGATTAACGCTATGATTTGATTAGTCTTAGAGATAAGCGTTTATTGTA
 GAGACGCAGGGCGGGATGGTTTGATCGTCCGTTGCACTTGCGCAGTGAGGTACGTATATT
 CGACGGGTGTTATACTTTGAGTTTCAAATCATATTTCTCTATCTTAACGTTGTTATACAC
 CT

Restriction Sites:

NotI-NotI

ACCN:

NM_004560

Insert Size:

3600 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_004560.2](#), [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

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).