

Product datasheet for MR222051

Ros1 (NM_011282) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ros1 (NM_011282) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ros1
Synonyms: c-ros; Ros-1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR222051 representing NM_011282
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGAACATCTGCTGGCTCACCTGAACTTGTGAAGTTTGTGGTCCTGGGTGCATCATATGGATTT
 CTGTGGCAGAGTACAGTTCTGAGCAGCTGCCTAACGTCCTGTGTAACCTGGGCAGGCAGCTTGA
 CAGTGGCAGACGGTACAATCTGAGTGAGCGTGCATCCATGGATGTCAGTTTTGAACTCTGTAGATCAG
 GAAACGTGTGCTTAAAGTGAATGACACCTACGCCACCATTTGTGAGAGGGAGTCTGTGAGGTGCGCT
 GCAGCAATGCGGAGGGTAGCTACGAAGAGGAAGTCTGAAAGCACAGAAGCTTCTACAGCACCTTTGC
 ATCTTCCATTGGAAGTCATGGTGTGACATTACGCTGGAACCTGCCAACATCTCTGGAGTCAAATACATA
 ATCAATGGAAATATGCCAACTTCCAGGAAGCTGGACTTTCACGGAGACCGTGTCCAAGCTCTCATACA
 CGGTGGAACCCCTGCATCCATTCACAGAATATATTTTTCGAGTGGTTGGATCTTCACAGCCCAACTGCA
 TCTTTATCCCAACCAAGTCCCAGTTACAGGACTCATCTTATGGAGTCCAGAACTGCACCTCTCATC
 CTGAACATGGAAGCTGGAGCCCTGATACTGTGGAGGTGACGTGGGCTCCACCTCATTTCCAGGTGGAC
 CTATTTTGGGTTATAATTTAAGGCTCATCAGTAAAAATCAAAAATTAGATTCAGGGACACAGAGAACCAG
 TTTCCAGTTTTATTCTACTCTACCAAACACCACCTACAGGTTTTCTATCGCAGCAGTCAATGAAGTTGGT
 GAGGGCCAGAAGCAGAATCTACAGTTACCACTCCATCCCCATCAGTTCAAGAAGAACAATGGCTCT
 TTTTATCCAGAAAACCTCTCTAAGAAAGAGGCTTTGAACTACTAGTAGATGAAGCACATTGCCTTTG
 GTCAGATGCTATACACCATAATATTACAGGAATATCAGTCTATGCTCAGCAGCAAGTGGTTATTTTTCA
 GAAGGAACTGTACTGATGAAGGGGGCTGCCAACATGTCTGATGTGTCTGACCTGAGAATTTTTTACC
 AAGGCTCAGGTCTAGTGTCTTCTATCTCCATAGACTGGCTGTACCAAAGGATGATTTTCATCATGGATAA
 ACTGGTATATGTCTGTGAATTAAGAATTGCTCAAATTTAGAGGAAATCACTCCCTTCTCTCTTATTGCA
 CCTCAGAAAGTTGGTTGACTCCTACAATGGGTACCTCTTTTATCTCCTGAGAGACGGCATCTACAGAG
 TCAATCTCCCTTTGCCATCTGGCAGGGACACCAAAGCTGTGCGTATTGTGGAGAGTGGCACATTAAGGA
 CTTTGCAGTAAAGCCCCAATCCAAGCGAATCATTTACTTCAATGACACCATGCAACTCTTCATGTCAACG



[View online »](#)

TTTCTGGATGGCTCTGCCTTCCACCGGGTCTGCCTGGGTCCCCCTTGACTGTGAAGAGCTTTGCTT
 GTGAAAACAATGACTTCCTCATCACAGATGGCAAGGCCATTTTTTCAGCAGGACTCCCTGTCTTTCAATGA
 ATTCATCGTGGGATGTGACCTGAGTCACATAGAAGAGTTTGGGTTTGGTAACTTGGTCATCTTTGGCTCC
 TCTGTCCAGTCATACCCTCTGCCAGGACATCCACAGGAGGTCTCAGTGTCTTTGGTTCTCGAGAGGCC
 TTATTCAGTGGACGCCTCCTGCTCTGCCATAGGAGCCAGTCTTCCGCCTGGCAGAAGTGGACTTATGA
 AGTCAAAGTTTATCCCAGGACATCCTTGAAATCACTCAAGTTTTCTCGAACATAAGCGGGACCATGCTT
 AATGTACCCGAAGTGCAGAGTTTACAAGTACACTGTCTGTGAGAGCAAGTTCCTAAAGGCCAG
 GCCCTGGTCAGCACCATCAGTGGTACCACCTTGGTACCAGTCTGAACCACCATTCATCATGGCTGT
 GAAAGAAGATGGCTCTGGAGCAAACACTCTGTAGTTTTGGTCCAGGAGAATTCCTGCTCTGATGTA
 GAAACGTGTGAGATATGGATTGGTACAACAACAGCCTCTACTACAGTGACACAAAAGGCAACGTTTATG
 TGCGGCCCTCTGAATGGGATGGATATCTCAGAGAATTATCACATACCCAGCATTGTAGGAGCTGGGCTTT
 GGCCTTTGAATGGCTGGTCACTTTCTCTACTGGGCTGGGAAGACATATGTGATCCAAAGGCAGTCTGTG
 TTGACGGGACACCGGACATTGTGACTCATGTGAAGCTTTGGTGAATGACATGGCTGTGGATTCAAGTTG
 GTGGCTATCTCTATTGGACAACACTCTACTCAGTTGAAAGCACCAGACTCAATGGAGAAAGTTCTCTTGT
 ACTACAGGCTCAGCCCTGGCTCTCTGAAAAAAGGTTATTGCTCTAACACTAGACCTCAGTGATGGGCTC
 CTGATTGGCTGGTGCAGGACAATCAGTGTATTCACTGTACACAGCTGTTCTTCGAGGATGGAGTGGTG
 GGGATGCTACCATCACAGAGTTTGCAGCCTGGAGTACTTCTGAAATCTCCAGAATGCAGTGTACTA
 CAGTGGTAGACTCTTCTGGATCAATGGATTTAGGATCATTACAGCACAGGAAATAGGTGAGAGAACCAGT
 GTGTCTGTTTCGGAGCCAGCGAAATTCAGTTCACAATTATACAGACATCTCTCAAGCCTCTGCCAG
 GAAACTTTTCTCTACTCCCAAGGTTATCCAGATCCTGTTTCCAGGAGTCTTCATTTGCAATTTGAAGGACA
 CACTTCAAGTTTCCAAATCCTGTGGAATGAGCCCCCTGCGGTGGACTGGGCATCGTTTTCTACAGTGTG
 GAATTTAGCACTATTCCAAGTTCCTGATTATTGAACAACAGTCTTTACCTATTTTTACTGTGGAAGGAC
 TGGAGCCCTATACCTTATTTAATCTTTGTCACTCCTTATACCTACTGGGAAAGGCGAAAAAACATC
 TCTATCATTTTCGTGCACCTGAATCAGTTCCATCAGCACCCAGAAAACCCAGAATATTTATTTGCAAGC
 GGAAGATACACCAAGAAGAAATGAAGTTGTGGTAGAGTTCAGTGGAAATAAACCTAAGCATGAAAAATGGAG
 TGCTAACCAAATTTGAAATCTTCTATCACATATCTAAACAAAGTGGCACAAATAGATCAACTGAAGACTG
 GATGTCTGCCAGTGTATACCCCAAGTGTCTTTTCAACTGAGGCTGTGAGTCTGAGTATACTGTT
 GCCTTCCAGGTTAGAGTCTTACATCCAAAGGGCCAGGGCATTCTTGATATAGTGTCTAAAAACAT
 CAGAAATCAAGCCATGTCGATCTCATATCTTCTCGGCAATAAGATCGTGTCTTAGACATGGATCA
 AAATCAAGTTTTGTGGACATTTCCCTGGAGGGAGACGTCAGCACAGTGGGTACACAACAGACGATGAA
 ATGGGGTATTTCCGCTCAAGGAGACAGCTCTTCTCTGAAATTTGCGTAATCATTCCAGTCCAAGCTTT
 TCCAGGATGCACTGGTTTCTGACATTAGAGTATTGCTGTTGATTGGATTGCAAGGCACCTCACTTTGC
 TCTGAAAGCATCACAAAACGGAACACAGATATTCAATGTTGACCTTGAACACAAGGTGAAATCCCCCAGG
 GAGGTGAAGACTTGCAAAGCACATAACAATAATTTCTTCTCTATATATCCCCCTTGTAGTCTGTTGT
 ATTTGGACAGAAGTTTTCAGATCTGGGCCATCAGATGTTCTACTGCAATATTAGCAATCACACCTCGCAACA
 TGTTCTACAACCAAGGCTTCAAACCAACATGGAAGGAGTCAATGTTCTTGTAAATGTGACAGAATCTGAG
 TTAAGTGGGCAATGACTGTGGATACCTCTGACCCAGACAGACCATGGATATACTTTACCAAAAGGCAAG
 AGATCTGGGCCATGGATCTGGAAGGATGTCAGTGTGGAAAGTCAATCATGGTACCTACTATCCCTGGAAA
 AAGAATCATTAGCTTAAACAGTGGATGGGAGTTTATATATTGGATCATGAAAACAAGGATGATGCCCAA
 ATTTATCAAGCAAAGAAGGGAAGCGGGCCATCCTTTCCCAAGTGAAGGCCTCCAGGAGTAAAGCATATCT
 TGGCTTACAGTTCTGCTCTGCAGCCTTTCCAGATAAAGCATATCTGTCTCTAGTTCAGATATGGTAGA
 AGCAACTATATTATATGCCACCAACACCAGCCTCACACTCAAATACCTCCAGTCAAGACAAACCTCACG
 TGGCATGGTATTACCCACCCACGTCAACATACCTGATTTACTATATGGAAGCTAATAGGGCAAACAGCT
 CTGACAGGAGACAAAAATGCTGGAATCACAGGAGAATGTAGCCCGATTGAAGGCTGCAGCCATTTTC
 AATGTACATGATTAGATAGCTGTGAAGAACTATTATTAGAGCCTTTAGAACATTTACCTCTGGAAAA
 GAGATTCAGGACAAACTAAAAGTGGAGTGCCTGGGCGAGTTTGTATATCAACGCAACTGTGTTGTCGG
 ACACAGTCTCCATGTATTCTGGACAGAATCCCATAGCCAAACGGACCAAAAGAGTCAAGTCCGCTATCA
 GCTGGTTATGTCATACCTGGCTCCCATCTGAGACTCCTTAAGACAGGGTGAATTTCCAAGTGCACAG
 CTTTCTCTGCTCATCACTAAACTATCTGGTGGACAGCTCTATGTGATGAAGGTTCTGGCGTGCCACCCCTG
 AGGAAATGTGGTGTACTGAGAGTCACTCTGTGAGTGTCAACATGTTTGGACACACCAGAGAAAACCTCTGC
 CTTGGTTCCAGAGAACTAGTCTGCAGTTAGATTGGAAGGCTCGATCAAACGTTAACCTCACCGGATTT
 TGGTTTGAAGTCCAGAAGTGAATATAATGAGTTTTACCATGTCAAAGTTCATGCAGCCAAGGTCCAG

TTTATGTCTGTAACATCACAGATCTACAACCTTACACCTCCTATAACATTCGAGTGGTGGTGGTCTATAC
GACAGGAGAAAATAGCTCCTCCATTCCAGAGAGTTTCAAGACAAAAGCCGGAGTCCCAAGCAAACCCAGT
ATTCCTAAATTACTAGAAGGGAGTAAAAATCCATCCAGTGGGAAAAAGCTGAAGATAATGGGAGCAGAT
TGATGTACTACACCCTTGAGGTGAGAAAAGGCATTTCAAATGACTCACAGAACCAGAGTTCAAGGTGGAA
GGTGGTGTAAATGGGTCCTGCAGTAGCATTGGACATGGAGATCAAAAAACCTAAAAGGAACATTTAG
TTCAGAGCAGTTGCTGCAAAATGAAATTGGACTTGGAGAATATAGTGAAATCAGTGAAGACATTACATTAG
TGAAGATGGTGTGGATAACAGAAAAGTGGTGGAGTGGAGTGGAGTGGAGTGGAGTGGAGTGGAGTGGAGT
TACAGTCCCACTGACCTTTGTCTGGCATAGAAGCTTGAAGTCAAAAGCTTCCAAGGAAGGCCTCTCG
GTTCTCAACGACAACGACAAAGAGTTGGCTGAGCTTCGAGGTCTGGCGGTGGAGTGGGACTGGCCAATG
CCTGCTACGCAGTACATACTGTTCCAACCCAAGAAGAGATTGAAAATCTTCTGCCTTCCCTCGGGAGAA
GCTGAGCCTGCGTCTTTTGGTGGAAAGTGGAGCTTTGGAGAAGTGTATGAAGGCACAGCTATAGACATC
CTAGGCGTGGGAAGTGGAGAAATCAAAGTGGCAGTGAAGACCTTGAAGAAAGTTCAACAGACCAGGAGA
AGATTGAGTTCCTGAAGGAGGCGCACCTGATGAGCAAGTTAATCACCCCAACATTCTGAAGCAGCTGGG
AGTCTGTCTGTTAGGCGAACCCAGTACATTATCTGAACTGATGGAAGGGGAGACCTTCTAAGCTAT
CTGCGCAAAGCTCGGGGACAACGTTTCATGGTCTTCACTCACCTTGCTTGACCTGTAGAGCTGTGTG
TAGATATTTCAAAGGCTGCGTCTACTTGGAGCAGATGCACTTCACTCACAGGGATCTGGCAGCTCGGAA
TTGCCCTGTATCAGTGAAGACTACACCAGTCTCGGGTGTCAAGATTGGTGACTTTGGATTGGCAAGA
GAAATCTATAAAAATGATTATTATAGAAAAGAGAGGGGAAGGCCTGCTTCTGTTCCGGTGGATGGCTCCTG
AAAACCTGATGGACGGAATCTTCACTTCTCAGTCTGATGTATGGTCTTTGGAATTTTGGTGTGGGAGAT
TTAACTCTCGGTCATCAACCTTATCCAGCGCATTCCAACCTTGATGTTTTAACTATGTGCAAGCAGGA
GGGAGACTGGAGCCACCAAGAAATGTCCTGATGATCTGTGGAATTTAATGTCCCAATGCTGGGCTCAAG
AACCTGACCAAAGACCCACTTCCATAACATTCAAACCAGCTTCAGTTATTCAGAAATGTTTTCTTAAA
CAATGTTTTCTATTGTGGAGAAGCAGCTCCACCGGTGGAGTCAACAACAAGGCTTTGAAGGTGAAGAT
GATGAAATGGTCACTTTGAACTCAGATGACACGATGCCAGTTGCCTTGATGGAAAACCAAGAACCAAGAAG
GATTAATTATATGGTGCTTCCACAAAATGTAGCCAAGGTGAAGGAAGTTATGAGGGTCTCTAGGCC
TAAGGAACTTGGGTCATGTGATCTGAAGAAAGACAAGAAGCAACCACAGGCAGACAAAGATTTCTGCCAG
GAACCACAGGTGGCTTATGGCTCTCTGGCCTGTCTGAAGGCCTGAATTATGCCTGTCTTCTCACAGTG
AACATGGAGATGTGTCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222051 representing NM_011282
 Red=Cloning site Green=Tags(s)

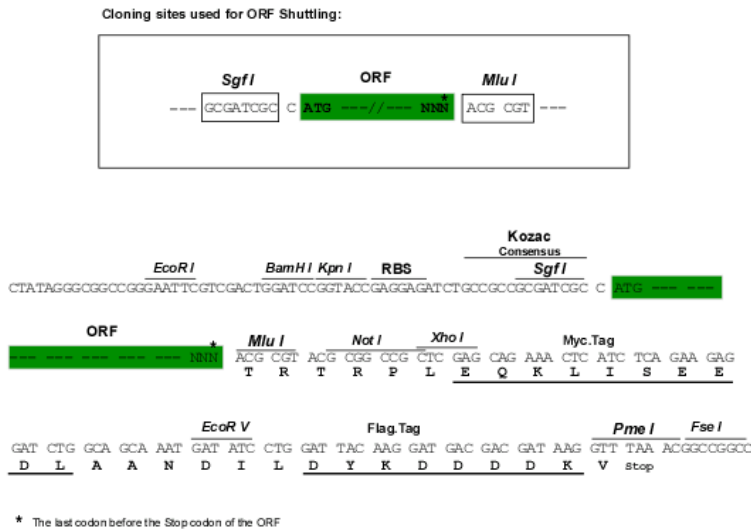
MKNICWLTLLKLVKVVVLGCIWIISVAQSTVLSCLTSCVTNLGRQLDSGTRYNLSEACIHGCQFWNSVDQ
 ETCALKCNDTYATICERESCEVGCNAEGSYEEVLESTELPTAPFASSIGSHGVTLRWNPANISGVKYI
 IQWKYALPGSWTFTEIVSKLSYTVLEPLHPFTEYIFRVVWIFTAQLHLYSPPSPSYRTHPYGVPETAPLI
 LNMEWSVSDTVEVSWAPPHFPGGPILGYNLRLISKQKLDLSDGTSFQFYSTLPNTTYRFSIAAVNEVG
 EGPEAESTVTTSPSPVQEEEQWLFSLRKTSLRKRSLKYLVEAHCLWSDAIHHNITGISVYAQQQVVFYS
 EGTVIWMKGAANMSDVSCLRIFVYQGSGLVSSISIDWLQYQRMFYIMDKLVYVCELKNCNLEEITPFSLIA
 PQKVVVDSYNGLYFYLLRDGIYRVNPLPSSGRDTKAVRIVESGLKDFAVKPKSKRIYFNDTMQLFMST
 FLDGSAFHRVLPWVPLVTVKSFACENDFLITDGKAIQQDLSFNEFIVGCDLSHIEEFGFNLVIFGS
 SVQSYPLPGHPQEVSVLFGSREALIQWTPPALAIGASPSAWQNWYEVKVVYSQDILEITQVFSNISGTM
 NPELQSSSTKYTVSVRASSPKGPGWAPS SVGTTLVPATEPPFIMAVKEDGLWSKPLCSFGPGEFLSSDV
 GNVSDMDWYNNLSYSDTKGNVYVRPLNGMDISENYHIPSIVGAGALAFEWLGHFLYWAGKTYVIQRQSV
 LTGHTDIVTHVKLLVNDMAVDSVGGYLWTTLYSVESTRLNGESSLVLAQAPWLSGKKVIALTDLSDGL
 LYWLVDNQCIHLTYAVLRGWSGGDATITEFAAWSTSEISQNALMYSSGRLFWINGFRITTAQEIQRQTS
 VSVSEPAKFNQFTIIQTSKPLPGNFSSTPKVIPDPVQESSFRIEGHTSSFQILWNEPPAVDWGIVFYSV
 EFSTHSHKFLIIIEQQSLPIFTVEGLEPYTLFNLVTPYTYWKGQKTSLSFRAPESVPSAPENPRIFILSS
 GRYTCKNEVVVEFRWNKPKHENGVLTKFEIFYHISKQSGTNRSTEDWMSASVIPPVMSFQLEAVSPEYTV
 AFQVRVFTSKGPGPFDIVMSKTSEIKPCPYLISLLGNKIVFLDMQDQNLWTFSLGEDVSTVGYTTDDE
 MGYFAQGDTLFLLNLRNHSSSKLFQDALVSDIRVIAVDWIARHL YFALKASQNGTQIFNVDLEHKVKS
 EVKTCKAHTTIIISFSIYPLL SRLYWTEVSDLGHQMFYCNISNHTSQHVLQPKASNOHGRSQCSNVTESE
 LSGAMTVDTSDPDRPWIYFTRQEIWAMDLEGCQKWKVIMVPTIPGKRIISLTVDFGEFYIWMKTKDDAQ
 IYQAKKSGGAILSQVKASRSKHILAYSSALQPFDPKAYLSLSDMVEATILYATNTSLTLKLPVKTNL
 WHGITHTPTSTYLIIYMEANRANSSDRRHKMLESQENVARIEGLQPFMYMIQIAVKNYYSEPLEHPLGK
 EIQQQTKSGVPGAVCHINATVLSDTSLHVFWTESHKPNGPKESVRYQLVMSYLAPIPETPLRQGEFPSAK
 LSLITKLSGGQLYVMKVLACHPEEMWCTESHVSVNMFDTPEKPSALVPENTSLQLDWKARSNVLTFG
 WFELQWKYNEFYHVKASCSQGPVYVCNITDLQPYTSYNIRVVVYTTGENSSSIPESFKTKAGVPSKPG
 IPKLEGSKNISIQWEKAEDNGSRLMYTLEVRKGISNDSQNSRQSSRWKVFVNGSCSSICTWRSKNLKGT
 FQFRAVAANEIGLGEYSEISEDITLVEDGVWITETSFILTIIVGIFLVATVPLTFVWHRSLKSHKASKE
 GLSVLNDNDKELAEALRGLAAGVGLANACYAVHTVPTQEEIENLPAFPREKLSLRLLLGSGAFGEVYEGT
 AIDLGVGSGEIKVAVKTLKKGSTDQEKIEFLKEAHLMSKFNHPNILKQLGVCLLGEQYIILELMEGD
 LLSYLRKARGTTFHGPSLTLDDLVELCVDISKGCYVLEQMHIHRDLAARNCLVSVKDYTSRVPVKIGD
 FGLAREIYKNDYYRKRGEGLLPVRWMAPELMDGIFTSQSDVVSFGILVWEILTLGHQPPAHSNLDV
 LNYVQAGGRLEPPRNCDDLWNLMSQCWAQEPDQRPTFHNIQNQLQLFRNVFLNNVSHCGEAAPTGGV
 INKGFEGEDDEMVTLSDDTMPVALMETKNQEGLYMVLATKCSQGEYSYEGPLGPKELGSCDLKDKKQ
 PQADKDFCQEPQVAYGSPGLSEGLNYACLAHSEHGDVSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9008_f08.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_011282

ORF Size: 7020 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_011282.2](#), [NP_035412.2](#)

RefSeq Size: 7401 bp

RefSeq ORF: 7023 bp

Locus ID: 19886

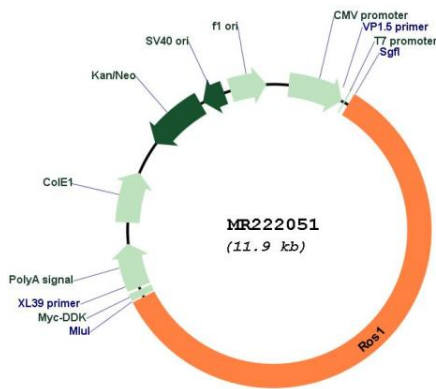
UniProt ID: [Q78DX7](#)

Cytogenetics: 10 26.18 cM

MW: 262.4 kDa

Gene Summary: Orphan receptor tyrosine kinase (RTK) that plays a role in epithelial cell differentiation and regionalization of the proximal epididymal epithelium. May activate several downstream signaling pathways related to cell differentiation, proliferation, growth and survival including the PI3 kinase-mTOR signaling pathway. Mediates the phosphorylation of PTPN11, an activator of this pathway. May also phosphorylate and activate the transcription factor STAT3 to control anchorage-independent cell growth. Mediates the phosphorylation and the activation of VAV3, a guanine nucleotide exchange factor regulating cell morphology. May activate other downstream signaling proteins including AKT1, MAPK1, MAPK3, IRS1, and PLCG2.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222051