

Product datasheet for **MR222774**

Ripor2 (NM_029679) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ripor2 (NM_029679) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ripor2
Synonyms:	1700108N18Rik; 6330500D04Rik; AI225904; E430013J17Rik; Fam65b; RP23-461O24.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222774 representing NM_029679 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGCCACCCGGTACTAAGCGTCTCCGGGCACTAGGAGCGTTCTCGGCAGGACTGCCAACCACTCCAG
AAATCATGCTGGTGGATCCCAGTCCTTCTCTCTGGCGGCCCAATGGCATCATCCGGAGCCAGTCCTT
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AAGAAGCCTCAGGCCAAGCTGAAGAAAATGCATAATCTTGACACAAAAATAACAACACTCCCAAGGAGC
CTCAGCCGAAGAGAGTGGAGGAGGTCTACCGGGCCTTGAAGAACGGGCTTGATGAGTACCTGGAGTTTCA
CCAGACGGAGCTGGACAAATTGACTGCTCAATTAAGATATGAAGAGAACTCTCGCCTGGGTGTGCTG
TATGACCTAGACAAGCAATTAACGATTGAGAGATACATGCGACGCCTGGAGTTTACATTAGTAAGG
TAGACGAGCTCTATGAAGCCTATTGTATCCAACGGCGTCTCCAAGATGGTGCCAGCAAAATGAAGCAAGC
CTTCGCGACGTCCCCTGCCAGCAAGGCTGCCCGGGAGAGTCTGTCTGAGATCAACCGCAGCTACAAGGAA
TACACGGAGAACATGTGTGCCATTGAAGCGGAGTTGGAGAGTCTGCTGGGAGAATTCTCCATCAAGATGA
AAGGTCTGGCTGGCTTTGCCCGCTCTGTCTGGAGATCAATATGAAATTTTCATGAAGTATGGTCGGCA
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CTGCCCCCTCATAGTTGGGTTTCATTTCAATCAAGGTCACAGAACTCAAAGGACTGGCGACTCACATCCTGG
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CCCCTCAGTTACACTCAGCCATCCAGAGATTACCATACCCCGCAGAGCTTACCCACAGCAGCCTG



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TCCTCACAAAATGAGGGCACCGAGGACAGCAGCTCAGCGTCTTCCAGGAATTCCTTGGGTGAGGACCATG
AGCCCAAGTCCCACCCAAAGAGTGATACGGTAGAGCCCGGAAGCCGGGTGTGGCTACAAGGTCTGGTAC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222774 representing NM_029679
Red=Cloning site Green=Tags(s)

MPPGTRKRLRALGAFSAGLPTRLPEIMLVGSQSFSPGGPNGIIRSQSFAGFSGLQERRSRCNSFIENASAL
KKPQAKLKKMHNHGHKNNTPKEPQPKRVEEVYRALKNGLDEYLEFHQTELDKLTALQKDMKRNRLGVL
YDLKQIKTIERYMRRLEFHIISKVDEL YEAYCIQRRQLDQASKMKQAFATSPASKAARESLSEINRSYKE
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LPLIVGFIKIVTELKGLATHILVGSVTCETKELFAARPQVAVDINDLGTIKLNLITWYFPDVEDTTP
SSGPGNKTAALQRRMSMYSQGTPEPTPTFDQSFRRWLRLSVLSALRDTFFATLHHNHSVGDPLSLNPK
ALLEFYSNLPDDIFESGKAAEEKRPLSLSFSDLQDQDCVFTSSSATSPSSSHSAHPEITITPAELTHSSL
SSQNEGTEDSSSASSRSLGEGHEPKSHPKSDTVEPGKPGVATRSGETSLFLESSVAEALLQESDEASEL
KPVELDTFEGNITKQLVKRLTSAEGPVTTDKLFFEGSVGSESEAGRSFLDGSLEDAFNGLFLALDPHKKQ
YKEFQDLNQEVTHLDDVLKCKPAGSRSRSSSLSLTVESALESFDFLNTSDFDEEEEDGDDVCHVGGGADS
VFSDTETEKSGYRSVHPEARGHLSEALTEDTGVGTSVAGSPLPLTTGNESLDITIVKHLQYCTQLIQQIV
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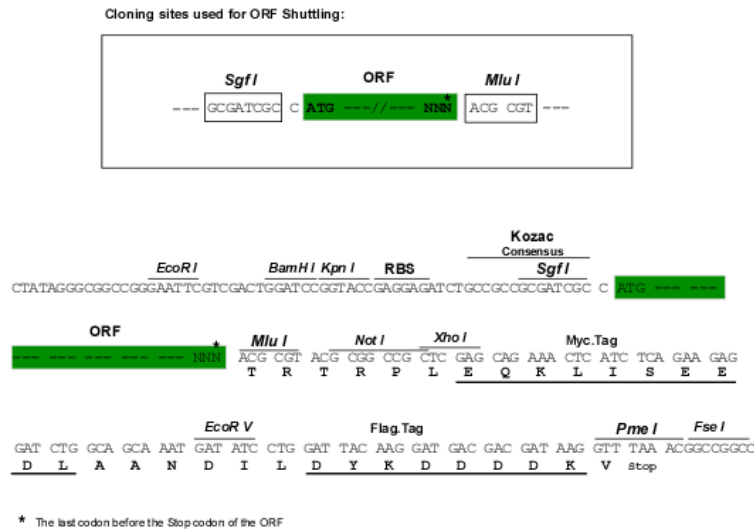
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9097_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_029679

ORF Size: 3234 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.

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

RefSeq: [NM_029679.2](#), [NP_083955.1](#)

RefSeq Size: 5598 bp

RefSeq ORF: 3237 bp

Locus ID: 193385

UniProt ID: [Q80U16](#)

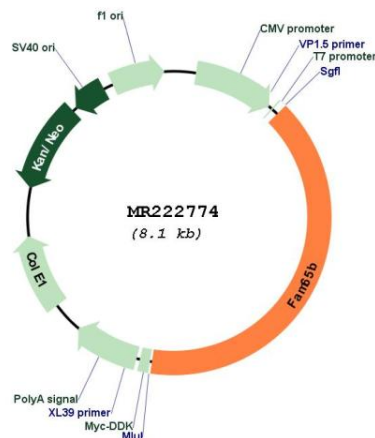
Cytogenetics: 13 A3.1

MW: 119 kDa

Gene Summary:

Acts as an inhibitor of the small GTPase RHOA and plays several roles in the regulation of myoblast and hair cell differentiation, lymphocyte T proliferation and neutrophil polarization (PubMed:25588844, PubMed:27269051). Plays a role in fetal mononuclear myoblast differentiation by promoting filopodia and myotube formation (PubMed:17150207). Maintains naive T lymphocytes in a quiescent state and prevents chemokine-induced T lymphocyte responses, such as cell adhesion, polarization and migration (By similarity). Involved also in the regulation of neutrophil polarization, chemotaxis and adhesion (PubMed:25588844). Required for normal development of inner and outer hair cell stereocilia within the cochlea of the inner ear (PubMed:27269051). Plays a role for maintaining the structural organization of the basal domain of stereocilia (PubMed:27269051). Involved in mechanosensory hair cell function (PubMed:27269051). Required for normal hearing (PubMed:27269051).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222774