

Product datasheet for **MG208493**

Ric8a (NM_053194) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ric8a (NM_053194) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ric8a
Synonyms:	A1114950; RIC-8; Ric8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208493 representing NM_053194
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCCGGGCAAGTTCGGATGCGCTTGGAGACCGGAGAGGAAGATGCGGTGACAGAAGCTCTGCGGT
 CGTTCAACCGGGAGCATTCTCAGAGCTTACCTTCGATGATGCCAGCAGGAGGACAGGAAGAGACTCGC
 AAAGCTACTGGTCTCCGTCCTGGAGCAGGGCTTGTCAACAAAGCACCGTGTACCTGGCTGCAGACTATC
 CGAATCTATCCCGAGACCGCAGCTGCCTGGACTCATTTGCCAGCCGCCAGAGCTTACATGCACTAGCCT
 GCTATGCTGACATTACCGTCTCAGAGGAACCCATCCCACAGTCCCAGACATGGATGTCTCTCGAGTC
 TCTCAAATGCCTGTGTAATCTTGTGCTCAGCAGTCCAACAGCACAGATGCTAGCAGCAGAGGCTCGCCTG
 GTGGTGGGCTAGCGGAGCGTGTGGGACTGTACCGCAAGAGGAGCTATCCCCACGAAGTCCAGTTCTTTG
 ACTTGAGGCTCCTTTTCTGCTAACAGCCCTTCGCACGGATGTGCCAGCAACTGTTTCAGGAGCTGCA
 CGGTGTACGCTGCTGACTGATGCGCTGGAACAACTGGGCGTGGCCCCAAAGAAAACCTCCGGTG
 ATGCTTCCAGCCAAAGAGACGGAGAGGGCCATGGAGATCCTCAAAGTGTCTTTAATATACCTTTGACT
 CTGTCAAGAGGGAAGTTGATGAGGAAGATGCTGCCCTTACCAGTACCTGGGACTCTTCTGCGGCACTG
 CGTGATGGTTGAAGTGTCTGGGACCGCACAGAGGAGTCCACGGCCACACGGTGAATCTCTGGGGAAC
 TTGCCCTCAAGTGTGGATGTCTTCTGGCCCTGGAGCTCCACGAAGGATCCTTAGAGTTCATGGGAG
 TTAACATGGATGTGATCAGTGCCTCCTCGCCTTCTAGAGAAACGTCTGCACCAGACCCACAGGCTGAA
 GGAATGTGTGGCACCTGTGCTGAACGTGTTGACAGAATGTGCCCGCATGCACCGTCTGCCAGGAAGTTC
 CTGAAGGCCAGGTCTGCCCTCTGAGGGATGTGAGGACTCGCCTGAGGTGGGGACCTGCTTCGAA
 ACAAGTTGTCCGCTCATGACACACCTGGATACAGATGTGAAGAGAGTAGCTGCCGAGTCTCTTTGCT
 CTTATGTTCTGAAAGTGTGCCCGATTCAAGTACACAGGCTACGGGAATGCTGCCGGCTCCTGGCT
 GCCAGGGCCTCATGGCTGGGGCCGACCCGAGGGCCAGTACTCAGAGGACGAGGACACGGACACAGAGG
 AGTACAGGGAAGCCAAGGCCAGCATCAACCCTGTGACTGGAAGGGTGGAGGAGAAGCCGCTAATCTAT
 GGAAGGCATGACAGAGGAGCAGAAGGAACATGAGGCCATGAAGCTAGTGAACATGTTTGACAAGCTCTCC
 AGGCACAGAGTCAACCCATGGGGATGAGTCCAGGGGTACCTCACTTCTCTGCAAGATGCGATGT
 GTGAGACAATGGAGGGACAGCTCTCTCAGACCCTGACTCAGATCCTGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208493 representing NM_053194
 Red=Cloning site Green=Tags(s)

MEPRAVADALETGEEDAVTEALRSFNREHSQSFTFDDAQQEDRKRLAKLLVSVLEQGLSPKHRVTWLQTI
 RILSRDRSCLDSFASRQSLHALACYADITVSEEPQPSPDMDVLLLESKLCNLVLSPTAQMLAAEARL
 VVRLAERVGLYRKRSYPHEVQFFDLRLLFLLTALRTDVRQQLFQELHGVRLLTDALELTLGVAPKENPPV
 MLPAQETERAMEILKVLFNITFDSVKREVDEEDAALRYLGTLLRHCVMVEAAGDRTEEFHGHTVNLGN
 LPLKCLDVLLALELHEGSLEFMGVNMDVISALLAFLEKRLHQTHRLKECVAPVLNVLTECARMHRPARKF
 LKAQVLPPLRDVTRPEVDLLRNKLVRLMTHLDTDVKRVAAEFLVLCSESVPRFIKYTYGNAAGLLA
 ARGLMAGGRPEGQYSEDEDTEEYREAKASINPVTGRVEEKPPNPMEGMTEEQKEHEAMKLVNMFDKLS
 RHRVIQPMGMSPRGHLTSLQDAMCETMEGQLSSDPDSDPD

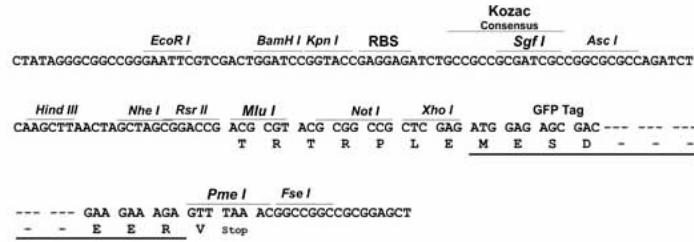
TRTRPLE – GFP Tag – V

Restriction Sites:

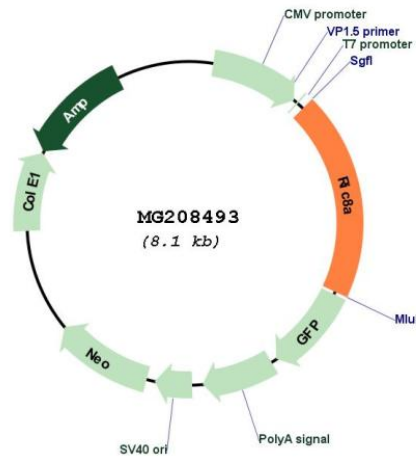
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	NM_053194
ORF Size:	1590 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:	<ol style="list-style-type: none">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_053194.4 , NP_444424.1
RefSeq Size:	2967 bp
RefSeq ORF:	1593 bp
Locus ID:	101489
UniProt ID:	Q3TIR3
Cytogenetics:	7 F4
Gene Summary:	Guanine nucleotide exchange factor (GEF), which can activate some, but not all, G-alpha proteins. Able to activate GNAI1, GNAO1 and GNAQ, but not GNAS by exchanging bound GDP for free GTP. Involved in regulation of microtubule pulling forces during mitotic movement of chromosomes by stimulating G(i)-alpha protein, possibly leading to release G(i)-alpha-GTP and NuMA proteins from the NuMA-GPSM2-G(i)-alpha-GDP complex. Also acts as an activator for G(q)-alpha (GNAQ) protein by enhancing the G(q)-coupled receptor-mediated ERK activation (By similarity).[UniProtKB/Swiss-Prot Function]