

## Product datasheet for **RG212259**

### MRAS (NM\_012219) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MRAS (NM\_012219) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MRAS  
**Synonyms:** M-RAS; NS11; R-RAS3; RRAS3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG212259 representing NM\_012219  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAACCAGCGCCGTCCCCAGTGACAACCTCCCCACATACAAGCTGGTGGTGGTGGGGATGGGGGTG  
TGGGCAAAAGTGCCCTCACCATCCAGTTTTTCCAGAAGATCTTTGTGCCTGACTATGACCCACCATTGA  
AGACTCTACCTGAAACATACGGAGATTGACAATCAATGGGCCATCTGGACGTTCTGGACACAGCTGGG  
CAGGAGGAATTCAGCGCCATGCGGGAGCAATACATGCGCACGGGGGATGGCTTCCTCATCGTCTACTCCG  
TCACTGACAAGGCCAGCTTTGAGCACGTGGACCGCTTCCACCAGCTTATCCTGCGCGTCAAAGACAGGGA  
GTCAATCCCGATGATCCTCGTGGCCAACAAGGTCGATTTGATGCACTTGAGGAAGATCACCAGGGAGCAA  
GGAAAAGAAATGGCGACCAAAACAATACTCCGTACATAGAAACCAGTGCCAAGGACCCACCTCTCAATG  
TCGACAAAGCCTTCCATGACCTCGTTAGAGTAATTAGGCAACAGATTCGGAAAAAGCCAGAAGAAGAA  
GAAGAAAACCAATGGCGGGGAGACCGGGCCACAGGCACCCACAACTGCAATGTGTGATCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG212259 representing NM\_012219  
Red=Cloning site Green=Tags(s)

MATSAVPSDNLPTYKL VVVGDDGGVGKSALTIQFFQKIFVPDYDPTIEDSYLKHTEIDNQWAILDVLDTAG  
QEEFSAMREQYMRDGDGFLIVSVTDKASFHVDRFHQLILRVKDRESFPMILVANKVDLMHLRKITREQ  
GKEMATKHNTPIYIETSAKDPPLNVDKAFHDLVRVIRQQIPEKSQKKKKKTKWRGDRATGTHKLQCVIL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_012219

**ORF Size:** 624 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\\_012219.4](#)

**RefSeq Size:** 3926 bp

**RefSeq ORF:** 627 bp

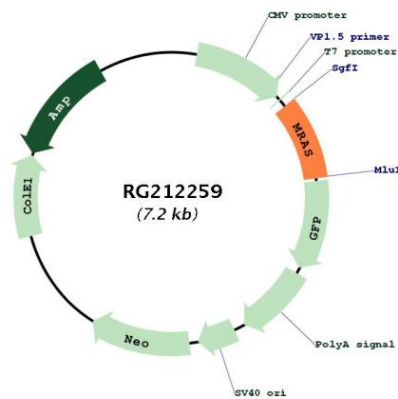
**Locus ID:** 22808

**UniProt ID:** [O14807](#)

**Cytogenetics:** 3q22.3

<b>Domains:</b>	ras, RAN, RAS, RHO, RAB
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	MAPK signaling pathway, Regulation of actin cytoskeleton, Tight junction
<b>Gene Summary:</b>	This gene encodes a member of the Ras family of small GTPases. These membrane-associated proteins function as signal transducers in multiple processes including cell growth and differentiation, and dysregulation of Ras signaling has been associated with many types of cancer. The encoded protein may play a role in the tumor necrosis factor-alpha and MAP kinase signaling pathways. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]

## Product images:



Circular map for RG212259