

Product datasheet for **RG210715**

RASSF1 (NM_170712) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RASSF1 (NM_170712) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RASSF1
Synonyms: 123F2; NORE2A; RASSF1A; RDA32; REH3P21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG210715 representing NM_170712
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCTTGAACAAGGACGGTCTTACACAGGCTTCATCAAGGTTGAGCTGAAGCTGGTGCGCCCTGTCT
CTGTGCCCTCCAGCAAGAAGCCACCCTCCTTGCAGGATGCCCGGGGGCCAGGACGGGGCACAAGTGT
CAGGCGCCGCACTTCTTTACCTGCCAAGGATGCTGTCAAGCACCTGCATGTGCTGTCACGCACAAGG
GCACGTGAAGTATTGAGGCCCTGCTGCGAAAGTCTTGGTGGTGGATGACCCCCGAAGTTTGCCTCT
TTGAGCGCGCTGAGCGTACGGCCAAGTGTACTTGCAGGAACTGTGGATGATGAGCAGCCCTGCGGCT
GCGGCTCCTGGCAGGGCCAGTACAAGCCCTGAGCTTTGTCCCTGAAGGAAAATGACTCTGGGGAGGTG
AACTGGGACGCCCTCAGCATGCCTGAACTACATAACTTCTACGTATCCTGCAGCGGGAGGAGGAGGAGC
ACCTCCGCCAGATCCTGCAGAAGTACTCTATTGCCGCCAGAAGATCCAAGAGGCCCTGCACGCCTGCC
CCTTGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210715 representing NM_170712
Red=Cloning site Green=Tags(s)

MSLNKDGSYTGFIKVQLKLVRPVSVPSKPPSLQDARRGPGRGTSVRRRTSFYLPKDAVKHLHVLRSRTR
AREVIEALLRKFLVDDPRKFALFERAERHGQVYLRKLLDDEQPLRLRLLAGPSDKALSFVLKENDSGEV
NWDASFMPFLHNFLRILQREEEHLRQILQKYSYCRQKIQEALHACPLG

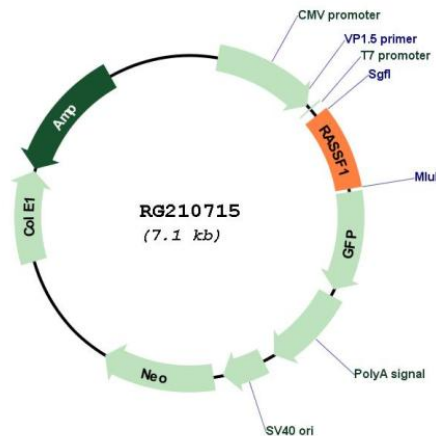
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_170712

ORF Size: 567 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_170712.3](#)

RefSeq Size: 1674 bp

RefSeq ORF: 570 bp

Locus ID: 11186

UniProt ID: [Q9NS23](#)

Cytogenetics: 3p21.31

Protein Families: Druggable Genome

Protein Pathways: Bladder cancer, Non-small cell lung cancer, Pathways in cancer

Gene Summary: This gene encodes a protein similar to the RAS effector proteins. Loss or altered expression of this gene has been associated with the pathogenesis of a variety of cancers, which suggests the tumor suppressor function of this gene. The inactivation of this gene was found to be correlated with the hypermethylation of its CpG-island promoter region. The encoded protein was found to interact with DNA repair protein XPA. The protein was also shown to inhibit the accumulation of cyclin D1, and thus induce cell cycle arrest. Several alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, May 2011]