

Product datasheet for **RC232037**

RASSF1 (NM_001206957) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RASSF1 (NM_001206957) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RASSF1
Synonyms: 123F2; NORE2A; RASSF1A; RDA32; REH3P21
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC232037 representing NM_001206957
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAGCTTGAACAAGGACGGTTCCTTACACAGGCTTCATCAAGGTTGAGCTGAAGCTGGTGCGCCCTGTCT
CTGTGCCCTCCAGCAAGAAGCCACCTCCTTGCAGGATGCCCGGGGGCCAGGACGGGACACAAGTGT
CAGGCGCCGCACTTCCTTTTACCTGCCAAGGATGCTGTCAAGCACCTGCATGTGCTGTCCACGCACAAGG
GCACGTGAAGTCAATTGAGGCCCTGCTGCGAAAGTCTTGGTGGTGGATGACCCCGCAAGTTTGCCTCT
TTGAGCGCGCTGAGCGTCACGGCAAGTGTACTTGCAGGAACTGTTGGATGATGAGCAGCCCTGCGGCT
GCGGCTCCTGGCAGGGCCAGTGAAGGCCCTGAGCTTTGTCCTGAAGGAAAATGACTCTGGGGAGGTG
AACTGGGACGCCTTCAGCATGCCTGAACACATAAATTCTACGTATCCTGCAGCGGGAGGAGGAGGAGC
ACCTCCGCCAGATCCTGCAGAAGTACTCTATTGCCGCCAGAAGATCCAAGAGGCCCTGCACGCCTGCC
CCTTGGG

ACGCGTACGCGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC232037 representing NM_001206957
Red=Cloning site Green=Tags(s)

MSLNKDGSYTGF IKVQLKLRVPSVSPSSKPPSLQDARRGPGRGTSVRRRTSFYLPKDAVKHLHVLRSRTR
AREVIEALLRKFLVDDPRKFALFERAERHGQVYLRKLLDDEQPLRLRLLAGPSDKALSFVLKENDSGEV
NWDAFSMPELHNFLRILQREEEHLRQILQKYSYCRQKIQEALHACPLG

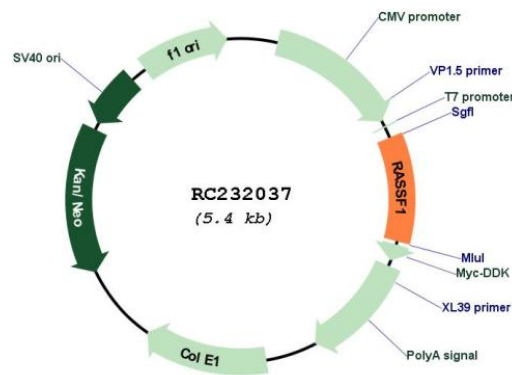
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001206957

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_001206957.1](#), [NP_001193886.1](#)

RefSeq Size: 1859 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

MW: 22.3 kDa

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]