

Product datasheet for SC313020

RASSF1 (NM 007182) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: RASSF1 (NM_007182) Human Untagged Clone

Tag: Tag Free Symbol: RASSF1

Synonyms: 123F2; NORE2A; RASSF1A; RDA32; REH3P21

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_007182 edited

GCGCTTGCTAGCGCCCAAAGCCAGCGAAGCACGGGCCCAACCGGGCCATGTCGGGGGAGC CTGAGCTCATTGAGCTGCGGGAGCTGGCACCCGCTGGGCGCGCTGGGAAGGGCCGCACCC GGCTGGAGCGTGCCAACGCGCTGCGCATCGCGCGGGGCACCGCGTGCAACCCCACACGGC AGCTGGTCCCTGGCCGTGGCCACCGCTTCCAGCCCGCGGGGCCCGCCACGCACACGTGGT GCGACCTCTGTGGCGACTTCATCTGGGGCGTCGTGCGCAAAGGCCTGCAGTGCGCGCATT GCAAGTTCACCTGCCACTACCGCTGCCGCGCGCTCGTCTGCCTGGACTGTTGCGGGCCCC GGGACCTGGGCTGGGAACCCGCGGTGGAGCGGGACACGAACGTGGACGAGCCTGTGGAGT GGGAGACACCTGACCTTTCTCAATCTGAGATTGAGCAGAAGATCAAGGAGTACAATGCCC AGATCAACAGCAACCTCTTCATGAGCTTGAACAAGGACGGTTCTTACACAGGCTTCATCA AGGTTCAGCTGAAGCTGGTGCGCCCTGTCTCTGTGCCCTCCAGCAAGAAGCCACCCTCCT TGCAGGATGCCCGGCGGGGCCCAGGACGGGGCACAAGTGTCAGGCGCCGCACTTCCTTTT ACCTGCCCAAGGATGCTGTCAAGCACCTGCATGTGCTGTCACGCACAAGGGCACGTGAAG TCATTGAGGCCCTGCTGCGAAAGTTCTTGGTGGTGGATGACCCCCGCAAGTTTGCACTCT TTGAGCGCGCTGAGCGTCACGGCCAAGTGTACTTGCGGAAGCTGTTGGATGATGAGCAGC CCCTGCGGCTGCGGCTCCTGGCAGGGCCCAGTGACAAGGCCCTGAGCTTTGTCCTGAAGG AAAATGACTCTGGGGAGGTGAACTGGGACGCCTTCAGCATGCCTGAACTACATAACTTCC TACGTATCCTGCAGCGGGAGGAGGAGGAGCACCTCCGCCAGATCCTGCAGAAGTACTCCT ATTGCCGCCAGAAGATCCAAGAGGCCCTGCACGCCTGCCCCCTTGGGTGACCTCTTGTAC CCCCAGGTGGAAGGCAGACAGCAGCGCCAAGTGCGTGCCGTGTGAGTGTGACAGGG CCAGTGGGGCCTGTGGAATGAGTGTGCATGGAGGCCCTCCTGTGCTGGGGGAATGAGCCC

AGAGAACAGCGAAGTAGCTTGCTCCCTGTGTCCACCTGTGGG

Restriction Sites: Please inquire **ACCN:** NM_007182



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Insert Size: 1300 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by

calling 301.340.3188 option 3 for pricing and delivery.

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: The ORF of this clone has been fully sequenced and found to be a perfect match to

NM_007182.4.

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: <u>NM 007182.4, NP 009113.3</u>

 RefSeq Size:
 1968 bp

 RefSeq ORF:
 1023 bp

 Locus ID:
 11186

 UniProt ID:
 Q9NS23

 Cytogenetics:
 3p21.31

Domains: RA, DAG_PE-bind
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]

Transcript Variant: This variant (A) lacks an in-frame coding segment compared to variant D, resulting an isoform (A) that lacks an internal region, as compared to isoform D.