

Product datasheet for RC213525

RASSF1 (NM_007182) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RASSF1 (NM_007182) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RASSF1
Synonyms:	123F2; NORE2A; RASSF1A; RDA32; REH3P21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213525 representing NM_007182 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTCGGGGGAGCCTGAGCTCATTGAGCTGCGGGAGCTGGCACCCGCTGGGCGCGCTGGGAAGGGCCGCA
CCCGGCTGGAGCGTGCCAACGCGCTGCGCATCGCGGGGGCACCGCGTCAACCCACACGGCAGCTGGT
CCCTGGCCGTGGCCACCGCTTCCAGCCCGGGGCCGCCACGCACAGTGGTGCACCTCTGTGGCGAC
TTCATCTGGGGCGTCGTGCGCAAAGGCCTGCAGTGCAGCATTGCAAGTTCACCTGCCACTACCGCTGCC
GCGCGCTCGTCTGCCTGGACTGTTGCGGGCCCCGGGACCTGGGCTGGGAACCCGGTGGAGCGGGACAC
GAACGTGGACGAGCCTGTGGAGTGGGAGACACCTGACCTTCTCAATCTGAGATTGAGCAGAAGATCAAG
GAGTACAATGCCAGATCAACAGCAACCTTTCATGAGCTTGAACAAGGACGGTCTTACACAGGCTTCA
TCAAGGTTGAGCTGAAGCTGGTGCGCCCTGTCTCTGTGCCCTCCAGCAAGAAGCCACCCTCCTTGCAGGA
TGCCCCGGCGGGGCCAGGACGGGGCACAAGTGTGAGGCGCCGACTTCCTTTTACCTGCCAAGGATGCT
GTCAAGCACCTGCATGTGCTGTCACGCACAAGGGCACGTGAAGTATTGAGGCCCTGCTGCGAAAGTTCT
TGGTGGTGGATGACCCCCGCAAGTTTGCACCTTTGAGCGCGTGAGCGTCACGGCCAAGTGTACTTGGC
GAAGCTGTTGGATGATGAGCAGCCCCGCGCTGCGGCTCCTGGCAGGGCCAGTGACAAGGCCCTGAGC
TTTGTCTGAAGGAAAATGACTCTGGGGAGGTGAAGTGGGAGCCTTTCAGCATGCCTGAACTACATAACT
TCCTACGTATCCTGCAGCGGGAGGAGGAGGAGCACCTCCGCCAGATCCTGCAGAAGTACTCCTATTGCCG
CCAGAAGATCCAAGAGGCCCTGCACGCCTGCCCCCTTGGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC213525 representing NM_007182
Red=Cloning site Green=Tags(s)

MSGEPELIELRELAPAGRAGKGRTRLERANALRIARGTACNPTQRQLVPGRGHRFQPAGPATHTWCDLCGD
 FIWGVVRKGLQCAHCKFTCHYRCRALVCLDCCGPRDLGWEPVERDNTNDEPVEWETPDL SQSEIEQKIK
 EYNAQINSNLFMSLNKDGSYTGF IKVQLKLVPRVSVSPSSKKPPSLQDARRGPGRGT SVRRRTSFYLPKDA
 VKHLHVL SRTRAREVIEALLRKFLVDDPRKFALFERAERHGQVYLRKLLDDEQPLRLRLLAGPSDKALS
 FVLKENDSGEVNWDASFMPELHNFLRILQREEEHLRQILQKYSYCRQKIQEALHACPLG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2560_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007182

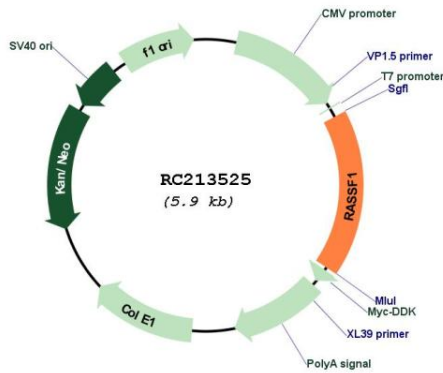
ORF Size: 1020 bp

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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

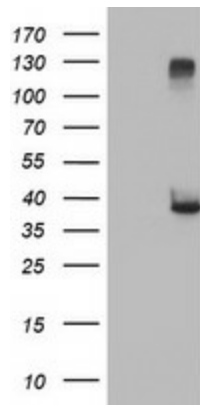
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:	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_007182.5
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
MW:	38.6 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]

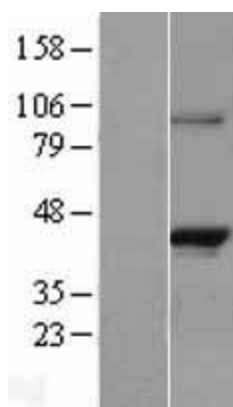
Product images:



Circular map for RC213525



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RASSF1 (Cat# RC213525, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RASSF1(Cat# [TA502487]). Positive lysates [LY402099] (100ug) and [LC402099] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402099]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213525 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).