

## Product datasheet for **RC212843**

### RASSF1 (NM\_170713) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RASSF1 (NM_170713) 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:	>RC212843 representing NM_170713. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCGAGGCGGAGGCGCCTTCTTTGAAATGACCTGGAGCAGCAGCAGCAGCAGTGGCTACTGCAGC
CAAGAGGACTCGGACTCGGAGCTCGAGCAGTACTTCACCGCGGAACCTCGCTAGCTCGCAGGCCGCGC
CGGGACCAGGACGAGCCTGTGGAGTGGGAGACACCTGACCTTTCTCAAGCTGAGATTGAGCAGAAGATC
AAGGAGTACAATGCCAGATCAACAGCAACCTCTTCATGAGCTTGAACAAGGACGGTTCTTACACAGGC
TTCATCAAGTTCAGCTGAAGCTGGTGGCCCTGTCTGTGCCCTCCAGCAAGAAGCCACCTCCTTG
CAGGATGCCCGGGGGCCAGGACGGGGCACAAGTGTCAGGCGCCGACTTCCTTTTACCTGCCAAG
GATGCTGTCAAGCACCTGCATGTGCTGTACGCACAAGGGCACGTGAAGTCATTGAGGCCCTGTGCGA
AAGTTCTTGGTGGTGGATGACCCCGCAAGTTTGCACCTTTGAGCGCGCTGAGCGTCACGGCCAAGTG
TACTTGGCGAAGCTGTTGGATGATGAGCAGCCCTGCGGCTGCGGCTCCTGGCAGGGCCAGTGACAAG
GCCCTGAGCTTTGCTCCTGAAGGAAAATGACTCTGGGGAGGTGAACTGGGACGCCTTCAGCATGCCTGAA
CTACATAACTTCTACGTATCCTGCAGCGGGAGGAGGAGGAGCACCTCCGCCAGATCCTGCAGAAGTAC
TCCTATTGCCGCCAGAAGATCCAAGAGGCCCTGCACGCCTGCCCCCTTGGG
ACGGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```



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**Protein Sequence:** >Peptide sequence encoded by RC212843  
 Blue=ORF Red=Cloning site Green=Tag(s)

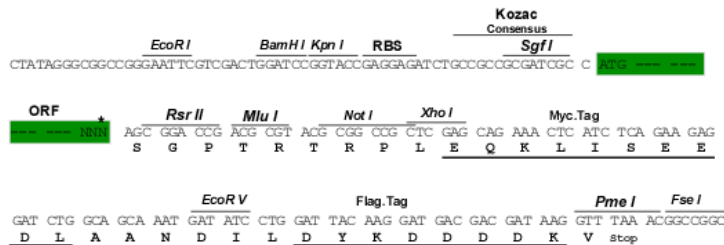
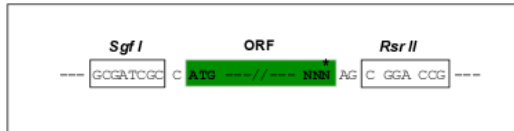
MGEAEAPSFEMTWSSTTSSGYCSQEDSDSELEQYFTARTSLARRPRRDQDEPVEWETPDL SQAIEQKI  
 KEYNAQINSNLFMSLNKDGSYTGF IKVQLKLV RPVSVSPSSKKPPSLQDARRGPRGTSVRRRTSFYLPK  
 DAVKHLHVL SRTRAREVIEALLRKFLVDDPRKFALFERAERHGQVYLRKLLDDEQPLRLRLLAGPSDK  
 ALSFVLKENDSGEVNDAF SMPELHNFRLILQREEEHLRQILQKYSYCRQKIQEALHACPLG  
 TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3596\\_a01.zip](https://cdn.origene.com/chromatograms/mg3596_a01.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_170713

**ORF Size:** 810 bp

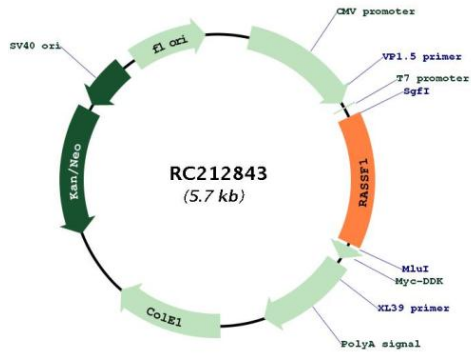
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

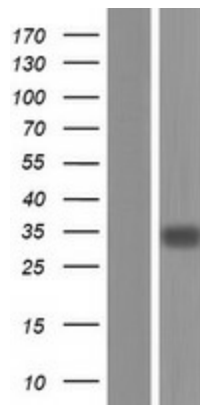
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_170713.3</a>
<b>RefSeq Size:</b>	1825 bp
<b>RefSeq ORF:</b>	813 bp
<b>Locus ID:</b>	11186
<b>UniProt ID:</b>	<a href="#">Q9NS23</a>
<b>Cytogenetics:</b>	3p21.31
<b>Domains:</b>	RA
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Bladder cancer, Non-small cell lung cancer, Pathways in cancer
<b>MW:</b>	31.2 kDa
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for RC212843



Western blot validation of overexpression lysate (Cat# [LY406892]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212843 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).