

Product datasheet for **RC206487**

RASGRP3 (NM_170672) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RASGRP3 (NM_170672) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RASGRP3
Synonyms:	GRP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC206487 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGATCAAGTGGCCTTGGGAAAGCAGCAACATTAGATGAACTGCTGTGCACTTGCATTGAGATGTTTG
 ATGACAATGGAGAGCTGGATAATAGTTATTTGCCAAGAATAGTTCTACTGATGCACCGATGGTATTTATC
 TTCCACTGAATTGGCAGAAAACTTCTCTGCATGTATCGAAATGCCACTGGAGAAAAGCTGCAATGAATTT
 CGATTAAGATCTGCTACTTTCATGAGGACTGGATTCTGAAGTTTCTGCAGAGTTAAATTTGGATCTTG
 GTTTGATTCGATGACTGAGGAATTTGGGAAAGTACTAGTCAACTAGGATATGAAAAACACGTCAGCCT
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ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206487 protein sequence
Red=Cloning site Green=Tags(s)

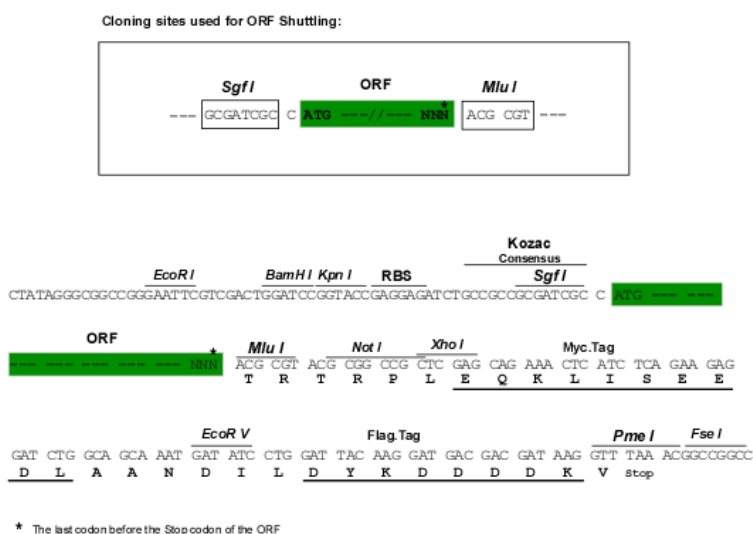
MGSSGLGKAATLDELLCTCIEMFDDNGELDNSYLPRIVLLMHRWYL S STELAEKLLCMYRNATGESCNEF
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 NGNYCNRYKAFADCDGFKIPILGVHLKDLIAVHVIFPDWTEENKVNIVKMHQLSVTLSELVSLQNASHHL
 EPNMDLINLLTSLDLYHTEDDIYKLSLVLEPRNSKSQPTSP TTPNKPVVPLEWALGVMPKPDPTVINKH
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 PGSPSLPPAQDEVFEFPGVTAGHRDLDSRAITLVTGSSRKISVRLQRATTSQATQTEPVWSEAGWGDGSGS
 HTFFPKMKS KFHDKAAKDKGFAK WEN EKPRVHAGVDVDRGTEFELDQDEGEETRQDGEDG

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6015_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170672

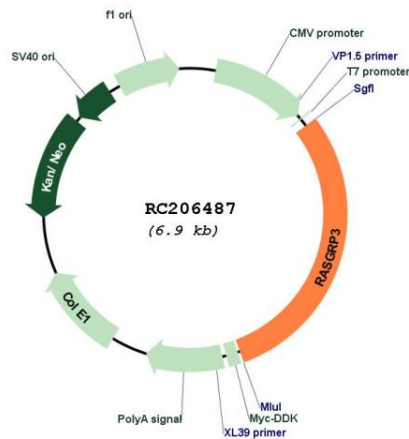
ORF Size: 2070 bp

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](#)

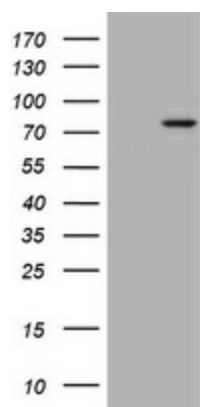
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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:	<u>NM_170672.3</u>
RefSeq Size:	4711 bp
RefSeq ORF:	2073 bp
Locus ID:	25780
UniProt ID:	<u>Q8IV61</u>
Cytogenetics:	2p22.3
Domains:	RasGEFN, RasGEF, EFh, DAG_PE-bind
Protein Pathways:	B cell receptor signaling pathway, MAPK signaling pathway
MW:	78.3 kDa
Gene Summary:	The protein encoded by this gene is a guanine nucleotide exchange factor that activates the oncogenes HRAS and RAP1A. Defects in this gene have been associated with systemic lupus erythematosus and several cancers. [provided by RefSeq, Mar 2017]

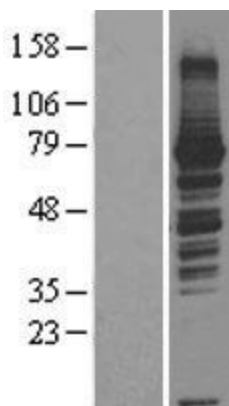
Product images:



Circular map for RC206487



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RASGRP3 (Cat# RC206487, 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-RASGRP3(Cat# [TA801533]). Positive lysates [LY403524] (100ug) and [LC403524] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY427967]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227703] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).