

Product datasheet for **RG210733**

RAE1 (NM_001015885) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAE1 (NM_001015885) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAE1
Synonyms:	dj481F12.3; dj800J21.1; Gle2; MIG14; Mnrp41; MRNP41
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210733 representing NM_001015885 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCCTGTTTGAACAACCTCAGGTTTTGAACCAAGTGGGACCAGCATGTTTGGCAGTGCAACTACAG
 ACAATCACAATCCCATAAGGATATTGAAGTAACATCATCTCCTGATGATAGCATTGGTTGTCTGTCTTT
 TAGCCACCAACCTTGCCGGGAACTTTCTATTGCAGGATCATGGGCTAATGATGTTTCGTGCTGGGAA
 GTTCAAGACAGTGGACAGACCATTCCAAAAGCCAGCAGATGCACACTGGGCCTGTGCTTGATGTCTGCT
 GGAGTGACGATGGGAGCAAAGTGTACGGCATCGTGTGATAAACTGCCAAATGTGGACCTCAGCAG
 TAACCAAGCGATACAGATCGCACAGCATGATGCTCCTGTTAAACCATCCATTGGATCAAAGCTCCAAAC
 TACAGCTGTGTGATGACTGGGAGCTGGGATAAGACTTTAAAGTTTGGGATACTCGATCGTCAAAATCCTA
 TGATGGTTTTGCAACTCCCTGAAAGGTGTACTGTGCTGACGTGATATACCCATGGCTGTGGTGGAAC
 TGCAGAGAGGGGCTGATTGTCTATCAGCTAGAGAATCAACCTTCTGAATTCAGGAGGATAGAATCTCCA
 CTGAAACATCAGCATCGGTGTGTGGCTATTTTAAAGACAACAGAACAGCCTACTGGTTTTGCCCTGG
 GAAGTATCGAGGGGAGAGTTGCTATTCACTATATCAACCCCCGAACCCCGCCAAAGATAACTTCACCTT
 TAAATGTCATCGATCTAATGGAACCAACACTTCAGCTCCTCAGGACATTTATGCGGTAATGGAATCGCG
 TTCCATCTGTTCATGGCACCTTGCAACTGTGGGATCTGATGGTAGATTACAGTTCTGGGACAAAGATG
 CCAGAACAAAATAAACTTCGGAACAGTTAGATCAGCCCATCTCAGCTTGCTGTTTCAATCACAAATGG
 AAACATATTTGCATACGCTTCCAGCTACGACTGGTCAAAGGGACATGAATTTTATAATCCCAGAAAAAA
 AATTACATTTCTGCGTAATGCAGCCGAAGAGCTAAAGCCAGGAATAAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


[View online »](#)

Protein Sequence: >RG210733 representing NM_001015885
 Red=Cloning site Green=Tags(s)

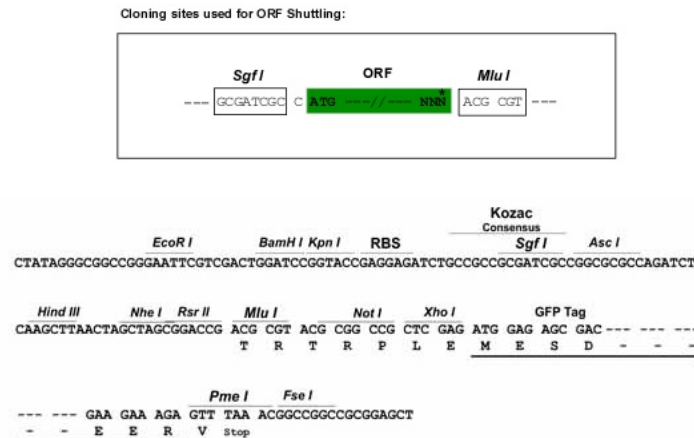
MSLFGTTSGFSGTSMFGSATTDNHNPMKDIEVTSSPDDSIGCLSFSPPTLPGNFLIAGSWANDVRCWE
 VQDSGQTIPKAQQMHTGPVLDVCWSDDGSKVFTASCDKTAKMWDLSSNQAIQIAQHDAPVKTIHWIKAPN
 YSCVMTGSWDKTLKFWDTRSSNPMMLVLQLPERCYCADVIYPMVAVATAERGLIVYQLENQPSFRRIESP
 LKHQHRCAIFKDKQNKPTGFALGSIEGRVAIHYNPPNPAKDNFTFKCHRSNGTNTSAPQDIYAVNGIA
 FHPVHGTLATVGSDFWSDGRFATKLTSEQLDQPIASACCFNHNGNIFAYASSYDWSKGHEFYNPQKK
 NYIFLRNAAEELKPRNKK

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001015885

ORF Size: 1104 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_001015885.1](#), [NP_001015885.1](#)

RefSeq Size: 1839 bp

RefSeq ORF: 1107 bp

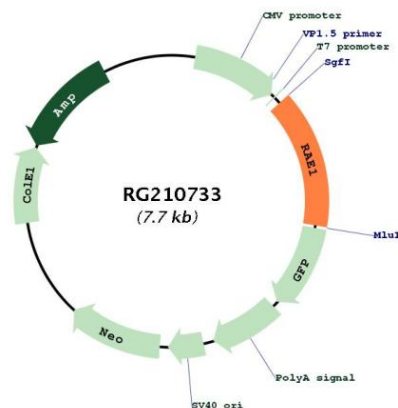
Locus ID: 8480

UniProt ID: [P78406](#)

Cytogenetics: 20q13.31

Gene Summary: Mutations in the *Schizosaccharomyces pombe* Rae1 and *Saccharomyces cerevisiae* Gle2 genes have been shown to result in accumulation of poly(A)-containing mRNA in the nucleus, suggesting that the encoded proteins are involved in RNA export. The protein encoded by this gene is a homolog of yeast Rae1. It contains four WD40 motifs, and has been shown to localize to distinct foci in the nucleoplasm, to the nuclear rim, and to meshwork-like structures throughout the cytoplasm. This gene is thought to be involved in nucleocytoplasmic transport, and in directly or indirectly attaching cytoplasmic mRNPs to the cytoskeleton. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG210733