

Product datasheet for **RG205710**

GTP binding protein era homolog (ERAL1) (NM_005702) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GTP binding protein era homolog (ERAL1) (NM_005702) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GTP binding protein era homolog
Synonyms:	CEGA; ERA; ERA-W; ERAL1A; ERAL1B; H-ERA; HERA-A; HERA-B; PRLTS6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205710 representing NM_005702 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCCCCAGCTGGCGCGGGGCTAGGCTTGTTCATCGGTGTTAAGAGTCTGGCAGGTGGGCCCTC
ATGTCGCGAGGGAGCGGGTGATCCCTTTTCTCACTCTTAGGCTTCCAACGGAGGTGCGTGTCTGCGT
CGCGGGGTCCGCTTCTCTGGTCCCGCTTGGCCTCGGCTTCTCGCAGTAATGGCCAGGGCTCTGCCCTG
GACCACTTCTCGGATTCTCTCAGCCCAGAGTTCGGTGACTCCTTGCCTCCCGCGGTGTCCATGAACA
GAGATGAGCAGGATGTCCTCTTGGTCCATCACCCTGATATGCCTGAGAATCCCGGGTCTACGAGTGGT
CCTCTGGGAGCCCCGAATGCAGGGAAGTCAACACTCTCCAACCAGCTACTGGGCCGAAAGGTGTTCCCT
GTTTCCAGGAAGGTGCATACTACTCGCTGCCAAGCTCTGGGGGTGTCACAGAGAAGGAGACCCAGGTGA
TTCTACTTGACACACCTGGCATTATCAGTCCTGGTAAACAGAAGAGGCATCACCTGGAGCTCTCTTGT
GGAAGATCCATGGAAGAGCATGGAATCTGCTGATCTTGTGTGTTCTTGTGGATGTCTCAGACAAGTGG
ACACGGAACAGCTCAGCCCCAGTTGCTCAGGTGCTTGACCAAGTACTCCAGATCCCTAGTGTCTGG
TCATGAACAAGGTAGATTGTTTGAAGCAGAAGTCAGTTCTCTGGAGCTCAGGCAGCCCTCACTGAAGG
TGTGGTCAATGGCAAAAAGCTCAAGATGAGGCAGGCCCTCCACTCACACCCTGGCAGCCATTGCCACGC
CCAGCAGTTAAGGACCCAAACACAATCTGTGGGAAATCCTCAGAGGATTGGCTGGCCCCACTTCAAGG
AGATCTTCATGTTGTGAGCCCTAAGCCAGGAGGACGTGAAAACACTAAAGCAATACCTTCTGACACAGGC
CCAGCCAGGGCCCTGGGAGTACCACAGTGCAGTCTCTACTAGCCAGACACCAGAAGAGATCTGTGCCAAC
ATTATCCGAGAGAAGCTCCTAGAACACCTGCCAGGAGGTGCCTTACAATGTACAGCAGAAGACAGCAG
TGTGGGAGGAAGGACAGGTGGGAGCTGGTTATCCAACAGAAGCTTCTGGTGCCCAAAGAATCTTATGT
GAAACTCTGATTGGTCCGAAGGCCACGTGATCTCCAGATAGCACAGGAGGCAGGCCATGACCTCATG
GACATCTTCTCTGCGATGTTGACATCCGCCTCTCTGTGAAGCTCCTCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205710 representing NM_005702
 Red=Cloning site Green=Tags(s)

MAAPSWRGARLVQSVLRVWQVGPVHVARERVIPFSSLLGFQRRCVSCVAGSAFSGPRLASASRSNGQGSAL
 DHFLGFSQPDSSVTPCVPVAVSMNRDEQDVLLVHHDPMPENSRVLRVVLLGAPNAGKSTLSNQLLGRKVFP
 VSRKVHTTRCQALGVITEKETQVILLDTPGIIISPGKQKRHHLELSLLEDPWKSMEADLVVVLVDVSDKW
 TRNQLSPQLLRCLTKYSQIPSVLVMNKVDCLKQKSVLLELTAALTEGVVNGKKLMRQAFHSHPGTHCPS
 PAVKDPNTQSVGNPQRIGWPHFKEIFMLSALSQEDVKTLKQYLLTQAQPGPWEYHSAVLTSTQTPPEICAN
 IIREKLLLEHLPQEVYPNVQKTAVWEEGPGGELVIQKLLVPKESYVKLLIGPKGHVISQIAQEAGHDLM
 DIFLCDVDIRLSVKLLK

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_005702

ORF Size: 1311 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005702.4](#)

RefSeq Size: 1856 bp

RefSeq ORF: 1314 bp

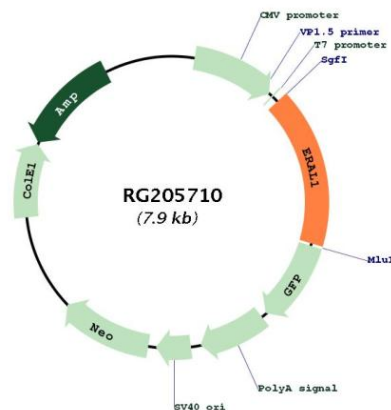
Locus ID: 26284

UniProt ID: [O75616](#)

Cytogenetics: 17q11.2

Gene Summary: The protein encoded by this gene is a GTPase that localizes to the mitochondrion. The encoded protein binds to the 3' terminal stem loop of 12S mitochondrial rRNA and is required for proper assembly of the 28S small mitochondrial ribosomal subunit. Deletion of this gene has been shown to cause mitochondrial dysfunction, growth retardation, and apoptosis. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG205710