

Product datasheet for **RC231835**

hCG (CGA) (NM_001252383) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: hCG (CGA) (NM_001252383) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CGA
Synonyms: CG-ALPHA; FSHA; GPA1; GPHa; GPHA1; HCG; LHA; TSHA
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC231835 representing NM_001252383
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

**ATGGATTACTACAGAAAATATGCAGCTATCTTTCTGGTCACATTGTCGGTGTCTGCATGTTCTCCATT
CCGCTCCTGATGTGCAGGAGACAGGTTTCACCATGTTGCCAGGCTGCTCTCAAACCTGAGCTCAAG
CAATCCACCCACTAAGGCTCCCAAAGTCTAGGATTACAGATTGCCAGAAATGCAGCTACAGGAAAAC
CCATTCTCTCCAGCCGGTGCCTCAATCTCAGTGCATGGGCTGCTGCTTCTCTAGAGCATATCCCA
CTCCACTAAGGTCCAAGAAGACGATGTTGGTCCAAAAGAAGTCCACCTCAGAGTCCACTTCTGTGTAGC
TAAATCATATAACAGGTCACAGTAATGGGGGTTTCAAAGTGGAGAACCACACGGCGTCCACTGCAGT
ACTTGTTATTATCACAAATCT**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence: >RC231835 representing NM_001252383
Red=Cloning site Green=Tags(s)

MDYYRKYAAIFLVLSVFLHVLHSAPDVQETGFHHVAQAALKLLSSNPPTKASQSARITDCPECTLQEN
PFFSQPGAPILQCMGCCFSRAYPTPLRSKKTMLVQKNVTSESTCCVAKSYNRVTVMGGFKVENHTACHCS
TCYYHKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

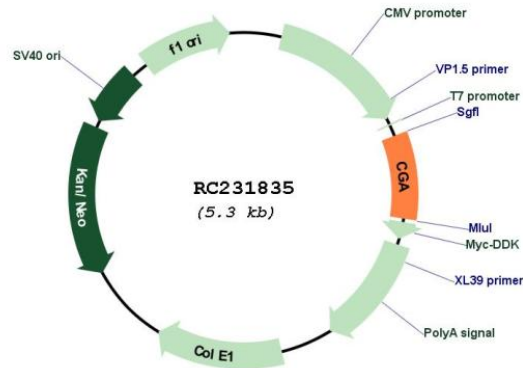


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001252383

ORF Size: 441 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_001252383.2
RefSeq Size:	861 bp
RefSeq ORF:	444 bp
Locus ID:	1081
UniProt ID:	P01215
Cytogenetics:	6q14.3
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
Protein Pathways:	Autoimmune thyroid disease, GnRH signaling pathway, Neuroactive ligand-receptor interaction
MW:	16.8 kDa

Gene Summary:

The four human glycoprotein hormones chorionic gonadotropin (CG), luteinizing hormone (LH), follicle stimulating hormone (FSH), and thyroid stimulating hormone (TSH) are dimers consisting of alpha and beta subunits that are associated noncovalently. The alpha subunits of these hormones are identical, however, their beta chains are unique and confer biological specificity. The protein encoded by this gene is the alpha subunit and belongs to the glycoprotein hormones alpha chain family. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]