

Product datasheet for RC212991

GnRH (GNRH1) (NM_000825) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GnRH (GNRH1) (NM_000825) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GnRH
Synonyms: GNRH; GRH; LHRH; LNRH
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC212991 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGAAGCCAATTCAAAACTCCTAGCTGGCCTTATTCTACTGACTTGGTGCCTGGAAGGCTGCTCCAGCC
 AGCACTGGTCCTATGGACTGCGCCCTGGAGAAAGAGAGATGCCGAAAATTTGATTGATTCTTTCCAAGA
 GATAGTCAAAGAGGTTGGTCAACTGGCAGAAACCAACGCTTCGAATGCACCACGCACCAGCCACGTTCT
 CCCCTCCGAGACCTGAAAGGAGCTCTGAAAGTCTGATTGAAGAGGAACTGGGCAGAAGAAGATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212991 protein sequence
 Red=Cloning site Green=Tags(s)
 MKPIQKLLAGLILLTWCVEGCSSQHSYGLRPGGKRDAENLIDSFQEIIVKEVGQLAETQRFECTTHQPRS
 PLRDLKGALESLEEETGQKKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6466_a06.zip

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_000825

ORF Size: 276 bp

OTI Disclaimer: 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.

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_000825.1](#)

RefSeq Size: 2166 bp

RefSeq ORF: 291 bp

Locus ID: 2796

Cytogenetics: 8p21.2

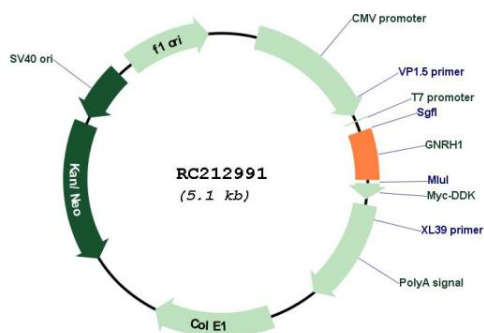
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: GnRH signaling pathway

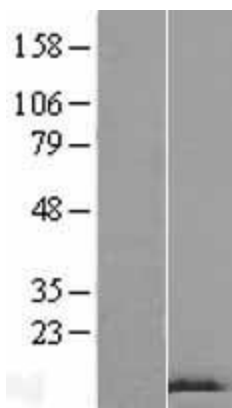
MW: 10.4 kDa

Gene Summary: This gene encodes a preproprotein that is proteolytically processed to generate a peptide that is a member of the gonadotropin-releasing hormone (GnRH) family of peptides. Alternative splicing results in multiple transcript variants, at least one of which is secreted and then cleaved to generate gonadoliberin-1 and GnRH-associated peptide 1. Gonadoliberin-1 stimulates the release of luteinizing and follicle stimulating hormones, which are important for reproduction. Mutations in this gene are associated with hypogonadotropic hypogonadism. [provided by RefSeq, Nov 2015]

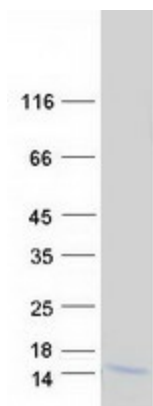
Product images:



Circular map for RC212991



Western blot validation of overexpression lysate (Cat# [LY421206]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219734] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GNRH1 protein (Cat# [TP312991]). The protein was produced from HEK293T cells transfected with GNRH1 cDNA clone (Cat# RC212991) using MegaTran 2.0 (Cat# [TT210002]).