

Product datasheet for **RC219734**

GnRH (GNRH1) (NM_001083111) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GnRH (GNRH1) (NM_001083111) 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: >RC219734 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCCAATTCAAAACTCCTAGCTGGCCTTATTCTACTGACTTGGTGCCTGGAAGGCTGCTCCAGCC
AGCACTGGTCCTATGGACTGCGCCCTGGAGAAAGAGAGATGCCGAAAATTTGATTGATTCTTTCCAAGA
GATAGTCAAAGAGGTTGGTCAACTGGCAGAAACCAACGCTTCGAATGCACCACGCACCAGCCACGTTCT
CCCCTCCGAGACCTGAAAGGAGCTCTGAAAGTCTGATTGAAGAGGAACTGGGCAGAAGAAGATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219734 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_001083111

ORF Size: 276 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_001083111.2](#)

RefSeq Size: 1297 bp

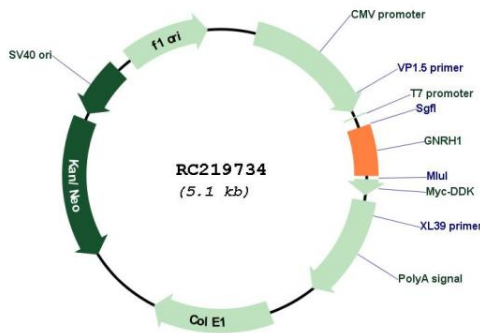
RefSeq ORF: 279 bp

Locus ID: 2796

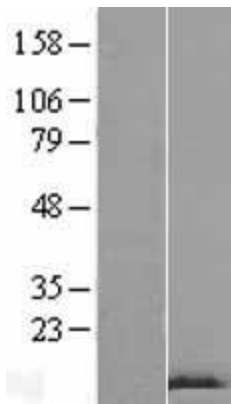
UniProt ID: [P01148](#)
Cytogenetics: 8p21.2
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: GnRH signaling pathway
MW: 10.4 kDa

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]

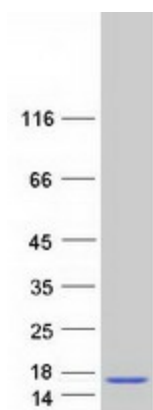
Product images:



Circular map for RC219734



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# [TP319734]). The protein was produced from HEK293T cells transfected with GNRH1 cDNA clone (Cat# RC219734) using MegaTran 2.0 (Cat# [TT210002]).