

## **Product datasheet for PH314336**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## GNRH2 (NM\_001501) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** GNRH2 MS Standard C13 and N15-labeled recombinant protein (NP 001492)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

RC214336

or AA Sequence: Predicted MW:

12.9 kDa

**Protein Sequence:** >RC214336 protein sequence

Red=Cloning site Green=Tags(s)

MASSRRGLLLLLLTAHLGPSEAQHWSHGWYPGGKRALSSAQDPQNALRPPGRALDTAAGSPVQTAHGLP

SDALAPLDDSMPWEGRTTAQWSLHRKRHLARTLLTAAREPRPAPPSSNKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

**Storage:** Store at -80°C. Avoid repeated freeze-thaw cycles.

**Stability:** Stable for 3 months from receipt of products under proper storage and handling conditions.

**RefSeq:** NP 001492

RefSeq Size: 423 RefSeq ORF: 360

Synonyms: GnRH-II; LH-RHII

**Locus ID:** 2797

UniProt ID: <u>O43555</u>

Cytogenetics: 20p13





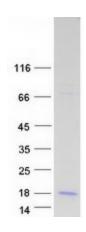
Summary:

This gene is a member of the gonadotropin-releasing hormone (GnRH) gene family. Proteins encoded by members of this gene family are proteolytically cleaved to form neuropeptides which, in part, regulate reproductive functions by stimulating the production and release of the gonadotropins follicle-stimulating hormone (FSH) and luteinizing hormone (LH). The human GNRH2 gene is predicted to encode a preproprotein from which a mature neuropeptide of 10 amino acids is cleaved. However, while the human genome retains the sequence for a functional GNRH2 decapeptide, translation of the human GNRH2 gene has not yet been demonstrated and the GNRH2 gene of chimpanzees, gorilla, and Sumatran orangutan have a premature stop at codon eight of the decapeptide sequence which suggests GNRH2 was a pseudogene in the hominid lineage. The GNRH2 gene is also believed to be a pseudogene in many other mammalian species such as mouse and cow. The receptor for this gene (GNRHR2) is predicted to be a pseudogene in human as well as many other mammalian species. The closely related GNRH1 and GNRHR1 genes are functional in human and other mammals and are generally functional in vertebrates. [provided by RefSeq, Mar 2019]

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** GnRH signaling pathway

## **Product images:**



Coomassie blue staining of purified GNRH2 protein (Cat# [TP314336]). The protein was produced from HEK293T cells transfected with GNRH2 cDNA clone (Cat# [RC214336]) using MegaTran 2.0 (Cat# [TT210002]).