GNRH2 Cell Lysate – Tissue Lysate

PRODUCT OVERVIEW

Product Name	GNRH2, Cell Lysate
Full Product Name	Human GNRH2 HEK293 Overexpression Lysate
Product Gene Name	GNRH2 cell lysate
Product Synonym Names	Human GNRH2/GnRH II HEK293 Cell Lysate (WB positive control); gonadotropin releasing hormone 2; Human GnRH-II Overexpression Lysate; Human GNRH2 Overexpression Lysate; Human LH-RHII Overexpression Lysate
Sequence	Gln24-Val1 20
Host	HEK293 Cells
Form/Format	1x Sample Buffer (1x modified RIPA buffer+1x SDS loading buffer). Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF.
Preparation and Storage	Store at 4 degree C for up to twelve months from date of receipt. After re-dissolution, aliquot and store at -80 degree C for up to twelve months. Avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt.
Molecular Weight	12,918 Da
Sequence Positions	357aa
OMIM	602352
3D Structure	ModBase 3D Structure for O43555
Species	Human
Recommend Usage	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube.**2. Re-dissolve the pellet using 200uL pure water and boil for 2-5 min.**
Sequence Construction	A DNA sequence encoding the human GNRH2 (NP_001492.1) (Gln24-Val120) was expressed with the Fc region of human IgG1 at the N-terminus.
Preparation Method	Cell lysate was prepared by homogenization of the over-expressed cells in ice-cold modified RIPA Lysis Buffer with cocktail of protease inhibitors. Cell debris was removed by centrifugation. Protein concentration was determined by Bradford assay (protein assay, Microplate Standard assay). The cell lysate was boiled for 5 min in 1 x SDS loading buffer (50mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized.
Applications Tested/Suitable for GNRH2 cell lysate	Western Blot (WB)
Application Notes for GNRH2 cell lysate	WB: Use at an assay dependent dilution.
Related Product Information for GNRH2 cell lysate	GNRH2 (Gonadotropin-Releasing Hormone 2) is a Protein Coding gene. 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). 3 alternatively spliced human isoforms have been reported. The second mammalian isoform (GNRH2) is an ineffective stimulant of gonadotropin release. Given that pigs lack testicular GNRHR1, these data may indicate that GNRH2 and its receptor are involved in the autocrine or paracrine regulation of testosterone secretion. Diseases associated with GNRH2 include Colon Mucinous Adenocarcinoma and Ovarian Cancer. This Human GNRH2 overexpression lysate was created in HEK293 Cells and intented for use as a Western blot (WB) positive control. Purification of GNRH2 protein from the overexpression lysate was verified.

Other Notes	Small volumes of GNRH2 cell lysate vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GNRH2 purchase	MBS8115491 is a cell lysate targeting GNRH2. Also known as Human GNRH2 HEK293 Overexpression Lysate. Host: HEK293 Cells.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GNRH2. It may not necessarily be applicable to this product.

NCBI GI #	4504057
NCBI GeneID	2797
NCBI Accession #	NP_001492.1
UniProt Primary Accession #	O43555
UniProt Secondary Accession #	Q14C68; Q14C69; Q9BYN9; Q9BYP0
UniProt Related Accession #	O43555
GenBank Nucleotide #	NM_001501.1
NCBI Official Full Name	progonadoliberin-2 isoform a preproprotein
NCBI Official Synonym Full Names	gonadotropin-releasing hormone 2
NCBI Official Symbol	GNRH2
NCBI Official Synonym Symbols	GnRH-II; LH-RHII
UniProt Protein Name	Progonadoliberin-2
UniProt Synonym Protein Names	Progonadoliberin IICleaved into the following 2 chains:Gonadoliberin-2Alternative name(s):Gonadoliberin II; Gonadotropin-releasing hormone II; GnRH II; Luliberin II; Luteinizing hormone-releasing hormone II; LH-RH II
Protein Family	Progonadoliberin
UniProt Gene Name	GNRH2
UniProt Synonym Gene Names	GnRH II; LH-RH II
UniProt Entry Name	GON2_HUMAN
NCBI Protein Information	progonadoliberin-2; luliberin II; progonadoliberin II; luteinizing hormone-releasing hormone II
NCBI Summary for GNRH2	The protein encoded by this gene is a preproprotein that is cleaved to form a secreted 10 aa peptide hormone. The secreted decapeptide regulates reproduction in females by stimulating the secretion of both luteinizing- and follicle-stimulating hormones. Three transcript variants that encode unique proproteins but the same peptide hormone have been found for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for GNRH2	**Function:** Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating hormones.
Research Articles on GNRH2	**1.** GnRHII expression correlated significantly with poor prognosis in breast cancer patients.
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