**BACKGROUND**

Human reproduction is controlled by the hypothalamic-pituitary gonadal axis laid down early in fetal development. Gonadotropin releasing hormone (GnRH), also known as GnRH-associated peptide, luteinizing hormone releasing hormone (LHRH), luteinizing or gonadorelin, is a decapeptide that is an important molecule in the hypothalamic-pituitary-gonadal axis control circuit. GnRH is produced by hypothalamic neurons and secreted in a pulsatile manner into the capillary plexus of the medianeminence. GnRH affects the release of luteinizing hormone and follicle stimulating hormone from gonadotropic cells in the anterior pituitary. In addition to hypothalamic GnRH (GnRH I), a second GnRH form (GnRH II) functions primarily in the midbrain. GnRH is expressed in the acrosomal region of human sperm and in the anterior pituitary tissue and cancer cells. Unlike GnRH I, GnRH II is highly expressed outside the brain, particularly in the kidney, bone marrow and prostate, suggesting that it may have multiple functions. GnRH binds to a specific G protein-coupled receptor in the pituitary to regulate synthesis and secretion of gonadotropins.

**CHROMOSOMAL LOCATION**

Genetic locus: GNRH1 (human) mapping to 8p21.2; Gngh1 (mouse) mapping to 14 D1.

**SOURCE**

GnRH I (HU11B) is a mouse monoclonal antibody raised against a synthetic peptide that represents the full length GnRH I decapeptide of rat origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GnRH I (HU11B) is available conjugated to agarose (sc-32292 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-32292 PE), fluorescein (sc-32292 FITC), Alexa Fluor® 488 (sc-32292 AF488), Alexa Fluor® 546 (sc-32292 AF546), Alexa Fluor® 594 (sc-32292 AF594) or Alexa Fluor® 647 (sc-32292 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-32292 AF680) or Alexa Fluor® 790 (sc-32292 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, GnRH I (HU11B) is available conjugated to biotin (sc-32292 B), 200 µg/ml, for WB, IHC(P) and ELISA.

**APPLICATIONS**

GnRH I (HU11B) is recommended for detection of GnRH I of mouse, rat and human origin by immunofluorescence (starting dilution 1:10, dilution range 1:10-1:1000), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of GnRH I pro form: 8 kDa.

Molecular Weight of GnRH I pre-proform: 10 kDa.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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