

GnRH Receptor / LHRH Receptor Monoclonal Mouse Antibody (A9E4)

Product Description

Recognizes an epitope on the extracellular domain of gonadotropin releasing hormone (GnRH) receptor or luteinizing hormone receptor (LHCGR). Lutropin (also designated luteinizing hormone) plays a role in spermatogenesis and ovulation by stimulating the testes and ovaries to produce steroids. Gonadotropin (also designated choriogonadotropin) production in the placenta maintains estrogen and progesterone levels during the first trimester of pregnancy. Ovaries and testes abundantly express luteinizing hormone/choriogonadotropin receptor. GnRH receptor contains seven hydrophobic transmembrane domains connected by hydrophilic extracellular and intracellular loops characteristic of G-protein coupled receptors. GnRH stimulates the gonadotrophs of the anterior pituitary to secrete luteinizing hormone (LH) as well as follicle-stimulating hormone (FSH). GnRH influences the protective effect of pregnancy and Gonadotropin against breast cancer. The expression of GnRH on breast carcinoma correlates in part to the degree of tumor differentiation. GnRH-positive breast tumors occur more frequently in tumors with greater cell differentiation in premenopausal women. GnRH is present in luteal and granulosa cells as well as in ovarian cell membrane preparations.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0309, Anti-GnRH Receptor (A9E4)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #0309 |
| Antibody reactivity (target) | GnRH Receptor, LHRH Receptor |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | A9E4 |
| Isotype | IgG1, kappa |
| Molecular weight | 54-60 kDa |
| Synonyms | GnRH receptor; GnRH-R; GNRHR1; gonadotropin-releasing hormone (type 1) receptor 1; GRHR; HH7; leutinizing-releasing hormone receptor; LHRHR; LRHR; luliberin receptor; luteinizing hormone releasing hormone receptor; Type I GnRH receptor |
| Human gene symbol | GNRHR, LHCGR |
| Entrez gene ID | 2798 (GNRHR) and 3973 (LHCGR) |
| SwissProt | P30968 (GNRHR) & P22888 (LHCGR) |
| Unigene | 407587 (GNRHR) 468490 (LHCGR) |
| Immunogen | A synthetic peptide aa 1-29 (MANSASPEONQHCASAINNSIPLMQGNLPY) from the N-terminal of human GnRH receptor. |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Human |
| Expected antibody applications | IHC (FFPE) (published for clone), IF (published for clone) |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Predicted to react with pig or rabbit; others not known. Optimal dilution for a specific application should be determined by user |
| Positive control | T47D cells. Pituitary gland, ovarian or breast cancers. |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C. Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Antibody research areas | Cancer, Endocrinology |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (<i>Bos taurus</i>), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- Horm Res Paediatr (2010) 73:312-319. (IHC, FFPE)
- BMC Cancer (2011) 11: 476. (IF, FFPE)

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