

MULTISCREEN™ STABLE CELL LINE DOG RECOMBINANT GnRH RECEPTOR

PRODUCT INFORMATION

Catalog Number: Cd1283

Lot Number: Cd1283-030121

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Cellbanker 2

Host cell: HEK293T

Transfection: Expression vector containing full-length dog GnRHR cDNA (GenBank Accession Number NM_001003121.1.) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 1 μ g/ml puromycin

Stability: In progress

Data sheet

Background: Gonadotropin-releasing hormone receptor (GnRHR) is a receptor for gonadotropin-releasing hormone (GnRH), also known as luteinizing hormone-releasing hormone (LHRH) and prolactin release-inhibiting factor (PIF). GnRHR is expressed on the surface of pituitary gonadotrope cells as well as lymphocytes, breast, ovary, and prostate. Gametes and preimplantation embryos also express GnRH and GnRHR. Binding of GnRH to GnRHR causes the release of follicle stimulating hormone (FSH) and luteinizing hormone (LH) from gonadotropic cells of the anterior pituitary. Mutations in GnRHR may cause hypogonadotropic hypogonadism and may be associated with anosmia.

Application: Functional assays

Figure 1.

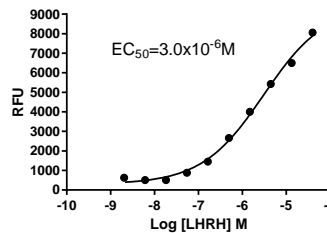


Figure 2.

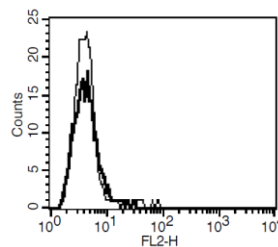


Figure 1. Dose-dependent calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor Expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Adelman *et al.* Two mammalian genes transcribed from opposite strands of the same DNA locus. *Science* 235:1514-1517, 1987.

Adelman *et al.* Isolation of the gene and hypothalamic cDNA for the common precursor of gonadotropin-releasing hormone and prolactin release-inhibiting factor in human and rat. *Proc Nat Acad Sci* 83:179-183, 1986.

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