

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT GHRH RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1291

Lot Number: C1291-051506

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human GHRHR cDNA (GenBank Accession Number NM_000823) with FLAG tag sequence at N-terminus.

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable after minimum of two months continuous growth

Background: Growth hormone-releasing hormone (GHRH), acting through the GHRH receptor GHRHR, plays a pivotal role in the regulation of GH synthesis and secretion in the pituitary. The isolated cDNA of the GHRHR predicted a 423-amino acid protein that has 7 putative transmembrane domains, characteristic of G protein-coupled receptors. It is a member of the secretin family of G protein-coupled receptors and has 47%, 42%, 35%, and 28% identity with receptors for vasoactive intestinal peptide, secretin, calcitonin and parathyroid hormone, respectively.

Application: Functional assays

Figure 1

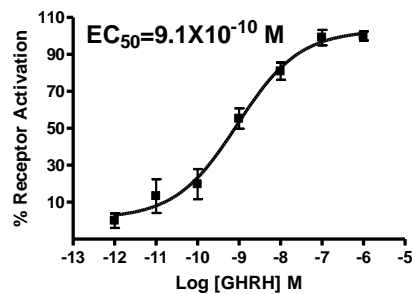


Figure 2

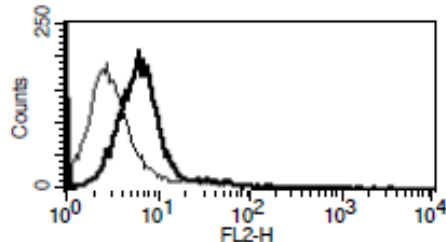


Figure 1. Dose-dependent accumulation of intracellular cAMP upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Gaylinn et al. (1993) Molecular cloning and expression of a human anterior pituitary receptor for growth hormone-releasing hormone. *Molec. Endocr* 7:77-84.

DeAlmeida and Mayo (1998) Identification and binding domains of the growth hormone-releasing hormone receptor by analysis of mutant and chimeric receptor proteins. *Molec Endocr* 12:750-765.

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