

$\begin{array}{c} \mathbf{MULTISCREEN^{TM} \ STABLE \ CELL \ LINE} \\ \mathbf{HUMAN \ RECOMBINANT \ GHRELIN \ RECEPTOR} \end{array}$

PRODUCT INFORMATION

Catalog Number: C1197-1

Lot Number: C1197-1-042010

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing

Medium (C-6164)

Host cell: CHO-K1

Transfection: Full-length Human GHSR cDNA (GenBank Accession Number NM_198407.1) with FLAG-tag

sequence at the N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 μ g/mL puromycin

Stability: Stable in culture for minimum of two months

Data sheet

Background: The ghrelin receptor is the target of growth hormone secretagogues, a class of synthetic peptide and non-peptide compounds that stimulate growth hormone (GH) release from the anterior pituitary. Ghrelin, the endogenous ligand for the ghrelin receptor, is predominantly secreted from X/A-like cells within the gastric mucosa and may be the source of the majority of circulating plasma ghrelin. Ghrelin stimulates gastric acid secretion and motility, and may have significant effects on appetite and energy. It is not only important for the acute regulation of food intake but also plays an important role in the regulation of long term energy homoeostasis. Ghrelin has a number of actions in cardiovascular system, consistent with the localization of receptors to cardiovascular tissue.

Application: Functional assays

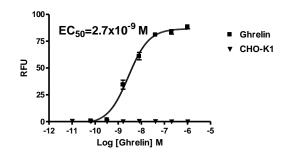


Figure legend: Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Howard *et al.* (1996) A receptor in pituitary and hypothalamus that functions in growth hormone release. *Science* 273:974-977.

Kojima and Kangawa (2005) Ghrelin: structure and function. Physiol Rev 85:495-522.

van der Lely *et al.* (2004) Biological, physiological, pathophysiological, and pharmacological aspects of ghrelin. *Endocr Rev* 25:426-457.