

MULTISCREENTM STABLE CELL LINE HUMAN RECOMBINANT GIP RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1290 Lot Number: C1290-020310

Quantity: 1 vial (2 x 106) frozen cells

Freeze Medium: Sigma Freezing

Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human GIPR cDNA (GenBank accession number NM_000164) with FLAG tag sequence at N-terminus

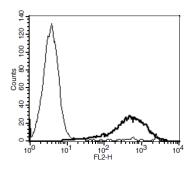
Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10%

FBS, 1 μg/mL puromycin

Stability: Stable in culture for minimum of two months

Figure 3



Data sheet

Background: GIP (gastric inhibitory polypeptide) is released from the gastrointestinal tract, stimulates insulin secretion from pancreatic beta-cells, and plays a crucial role in the regulation of insulin secretion. Its receptor GIPR is expressed in the pancreas, stomach, small intestine, adipose tissue, adrenal cortex, pituitary, heart, testis, endothelial cells, bone, trachea, spleen, thymus, lung, kidney, thyroid, and several regions in the CNS. GIPR may have therapeutic potential in the treatment of type 2 diabetes and obesity.

Application: Functional assays

Figure 1

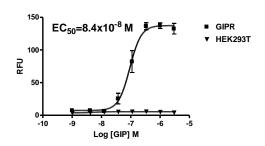


Figure 2

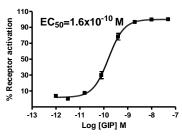


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). Figure 2. Dose-dependent stimulation of intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). Figure 3. 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:

Irwin et al. (2009) Therapeutic potential for GIP receptor agonists and antagonists. Best Pract Res Clin Endocrinol Metab 23:499-512.

Yamada et al. (1995) Human gastric ingibitory polypeptide receptor: cloning of the gene (GIPR) and cDNA. Genomics 29:773-776.

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