

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT CCK1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1038-1a

Lot Number: C1038-1a-111111

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Full-length human CCKAR cDNA (GenBank accession Number NM_000730.1) with FLAG tag sequence at 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

Background: Cholecystokinin (CCK) is a regulatory peptide hormone with many functions in the gastrointestinal tract and brain. CCK1 (also known as CCKA) receptors are present in the gall bladder, gastric smooth muscle cells and mucosa, myenteric neurons, and brain. CCK regulates gastric acid secretion, gastric emptying and gall bladder motility in the gastrointestinal tract. Clinical studies show that CCK1 may also be involved in many types of diseases, such as pancreatic disorders, motility disorders, tumor growth and regulation of satiety.

Application: Functional assays

Figure 1

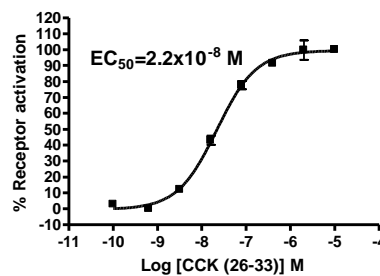


Figure 2

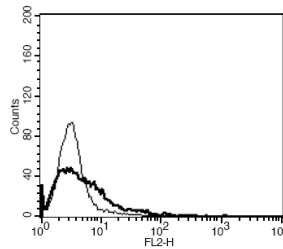


Figure 1. Dose-dependent stimulation of intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor Expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental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

References:

Berna, MJ *et al.* (2007) Role of CCK/gastrin receptors in gastrointestinal/metabolic diseases and results of human studies using gastrin/CCK receptor agonists/antagonists in these diseases. *Curr Top Med Chem* 7(12):1211-31.

de Weerth, A *et al.* (1993) Molecular cloning, functional expression and chromosomal localization of the human cholecystokinin type A receptor. *Biochem Biophys Res Commun* 194(2):811-8.

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