

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT CCK1 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1038

**Lot Number:** C1038-120810

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**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, 10% FBS, 1  $\mu$ g/mL puromycin

**Stability:** In progress

**Background:** Cholecystikinin (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 in the brain. CCK regulates gastric acid secretion, gastric emptying, and gall bladder motility in the gastrointestinal tract. Clinical studies show that CCK1 may be involved in many types of diseases, such as pancreatic disorders, motility disorders, tumor growth, and regulation of satiety.

**Application:** Functional assays

Figure 1

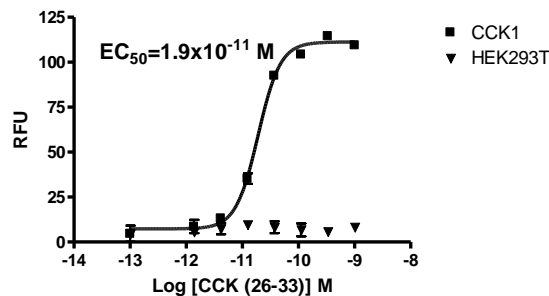
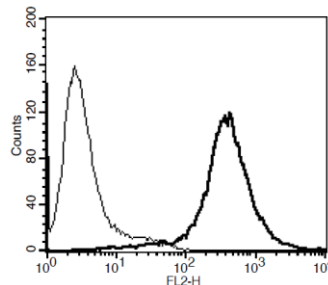


Figure 2



**Figure 1.** Dose-dependent stimulation of 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:

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 cholecystikinin type A receptor. *Biochem Biophys Res Commun* 194(2):811-8.

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