MULTISPAN
One-Stop Shop for GPCR Research

MULTISCREEN^{TM} STABLE CELL LINE
HUMAN RECOMBINANT CCK2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: H1039

Lot Number: H1039-070111

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human CCKBR cDNA (GenBank Accession Number NM_176875.2) 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

Background: Cholecystokinin B receptor (CCKBR/CCK2R) is a 447-amino acid 7 transmembrane protein. The cholecystokinin (CCK) family of peptides and their receptors are widely distributed throughout the central nervous system and gastrointestinal tract. CCKBR is a type B (gastrin) receptor that has high affinity for both sulfated and nonsulfated CCK analogs found principally in the CNS and select areas of the gastrointestinal tract. Type B receptors regulate anxiety, arousal, neuroleptic activity and opiate-induced analgesia. Outside of the CNS they regulate gastric acid secretion and may play a role in gastrointestinal motility and growth of normal and neoplastic gastrointestinal tissue. Northern hybridization shows CCKBR expressed in the stomach, pancreas, brain and gallbladder.

Application: Functional assays

Figure 1

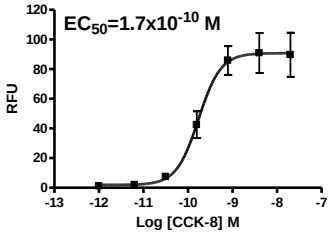

Figure 2

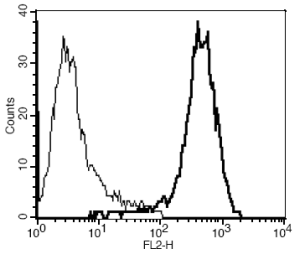

Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, monitored with FlexStation. **Figure 2**. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Beinborn *et al*. (1993) A single amino acid of the cholecystokinin-B/gastrin receptor determines specificity for non-peptide antagonists. *Nature* 362:348-350.

Pisegna *et al*. (1992) Molecular cloning of the human brain and gastric cholecystokinin receptor: structure, functional expression and chromosomal localization. *Biochem Biophys Res Commun* 189:296-303.

FOR RESEARCH USE ONLY.

www.multispaninc.com
sales@multispaninc.com
support@multispaninc.com

Phone: +1 (510) 887-0817
Fax: +1 (510) 887-0863
26219 Eden Landing Road
Hayward, CA 94545-3718
U.S.A.

Ver. October 2005