

RAT RECOMBINANT GPR88 RECEPTOR MULTISCREEN™ STABLE CELL LINES

Data sheet

PRODUCT INFORMATION

Catalog Number: Cr1141-1

Lot Number: Cr1141-1-060122

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: CellBanker2

Host cell: CHO-K1

Transfection: Expression vector containing full-length rat GPR88 cDNA (GenBank Accession Number: NM_031696.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: In progress

Background: GPR88 is an orphan G protein-coupled receptor (GPCR) considered as a promising therapeutic target for neuropsychiatric disorders including schizophrenia, Parkinson's disease, anxiety, and addiction. The biological effects of GPR88 activation and signal transduction pathway are still unknown due to the lack of a selective agonist appropriate for in vivo investigation.

Application: Functional assays

Figure 1

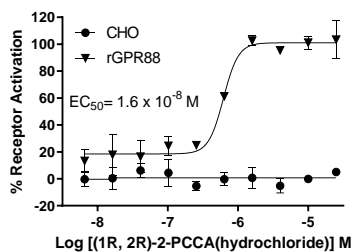


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

References:

Chunyang Jin, Ann M. Decker, Viren H. Makhijani, et al (2018). Discovery of a Potent, Selective, and Brain-Penetrant Small Molecule that Activates the Orphan Receptor GPR88 and Reduces Alcohol Intake. *Med Chem.* 2018 August 09; 61(15): 6748–6758

Jin, C., Decker, A. M., Huang, X. P., Gilmour, B. P., Blough, B. E., Roth, B. L., Hu, Y., Gill, J. B., & Zhang, X. P. (2014). Synthesis, pharmacological characterization, and structure-activity relationship studies of small molecular agonists for the orphan GPR88 receptor. *ACS chemical neuroscience*, 5(7), 576–587.

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