

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT GPR88 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1141-1

Lot Number: C1141-1-060320

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

Freeze Medium: CellBanker2

Host cell: CHO-K1

Transfection: Expression vector containing full-length human GPR88 cDNA (GenBank Accession Number: NM_022049.3) 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 for a minimum of 2 months in continuous culture

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

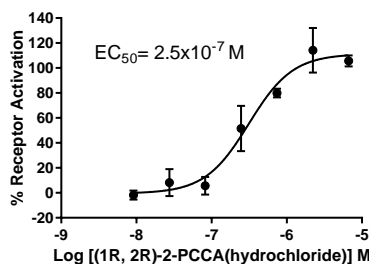


Figure 2

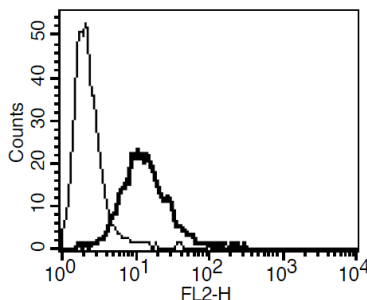


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG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

References:

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.

FOR RESEARCH USE ONLY.

All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.