

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT MGLU1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1188-1

Lot Number: C1188-1-040110

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human GRM1 cDNA (Accession Number NM_000838) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM with GlutaMAX (Gibco 10566), 10% FBS (dialyzed), 2 mM sodium pyruvate, 10 µg/mL puromycin

Stability: Stable in culture for minimum of two months

Background: The neurotransmitter L-glutamate interacts with both ionotropic and metabotropic receptors. The metabotropic glutamate receptors (mGluRs), which are G protein-coupled receptors, have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group II and group III mGluRs are linked to the inhibition of the cyclic AMP cascade, but differ in their agonist selectivity.

Application: Functional assays

Figure 1

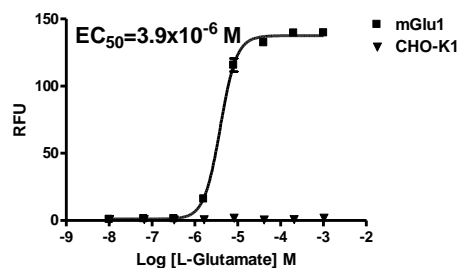


Figure 2

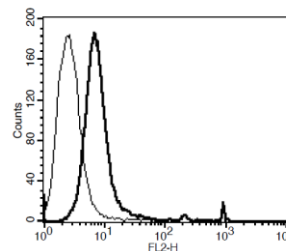


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

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:

Scherer *et al.* (1996) Localization of two metabotropic glutamate receptor genes, GRM3 and GRM8, to human chromosome 7q. *Genomics* 31:230-233.

Scherer *et al.* (1997) The human metabotropic glutamate receptor 8 (GRM8) gene: a disproportionately large gene located at 7q31.3-q32.1. *Genomics* 44:232-236.

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