

MULTISCREEN™ STABLE CELL LINE RAT RECOMBINANT MGLUR2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: HGr1189

Lot Number: HGr1189a-033023

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

Freeze Medium: Cellbanker 2

Host cell: HEK293T $G\alpha_{qi5}$

Transfection: Expression vector containing full-length rat Grm2 cDNA 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, 1 μ g/mL puromycin, 50 μ g/mL hygromycin

Stability: In progress

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. The mGluR2 is a member of group II metabotropic glutamate receptors.

Application: Functional assays

Figure 1

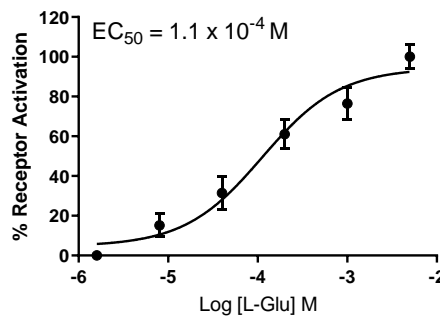


Figure 2

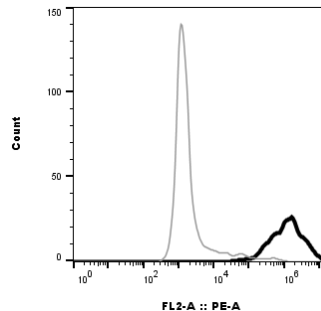


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

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:

Flor *et al.* (1995) Molecular cloning, functional expression and pharmacological characterization of the human metabotropic glutamate receptor type 2. *Eur J Neurosci* 7:622-629.

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