

MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT MGLUR8 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1195a

Lot Number: C1195a-080615

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human mGluR8 cDNA (GenBank Accession Number NM_000845.1) 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

Stability: Stable for minimum two months continuous growth

Background: The metabotropic glutamate receptors (mGluRs) 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 agonist selectivity. Group III agonists include L-2-amino-4-phosphonobutyrate (L-AP4) and L-serine-O-phosphate. The human mGluR8 protein shares 67 to 70% sequence similarity with mGluR4 and mGluR7 and 99% amino acid identity with mouse mGluR8.

Application: Functional assays

Figure 1

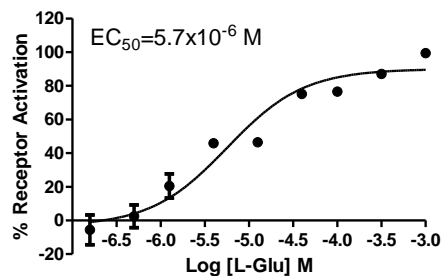


Figure 2

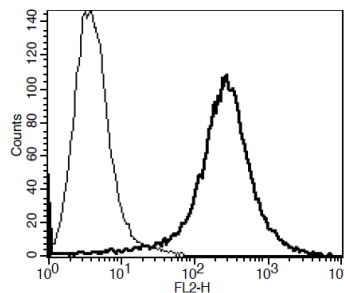


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG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

References:

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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