

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT mGLUR4 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1191a

**Lot Number:** C1191a-040910

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human GRM4 cDNA (GenBank Accession Number NM\_000841.1) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

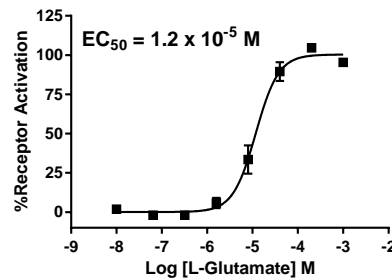
**Propagation Medium:** DMEM with GlutaMAX (Gibco 10566), 10% FBS (dialyzed), 2 mM sodium pyruvate, 1 µg/mL puromycin

**Stability:** Stable after two months of continuous growth

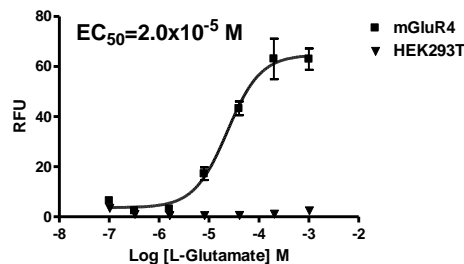
**Background:** L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. The metabotropic glutamate receptors, which are G protein-coupled receptors, have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms and pharmacologic properties. Group II and group III receptors are linked to the inhibition of the cyclic AMP cascade, but differ in their agonist selectivity. Group III agonists include L-2-amino-4-phosphonobutyrate (L-AP4) and L-serine-O-phosphate.

**Application:** Functional assays

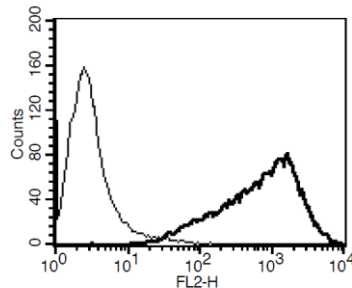
**Figure 1**



**Figure 2**



**Figure 3**



**Figure 1.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 3.** 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:**

Wu *et al.* (1998) Group III human metabotropic glutamate receptors 4, 7 and 8: molecular cloning, functional expression, and comparison of pharmacological properties in RGT cells. *Mol Brain Res* 53:88-97.

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