DATA SHEET

CELL LINE DESIGNATION ORIGIN (PARENTAL CELL) GENE INTRODUCED RECEPTOR INTRODUCED: Glutamate Receptor, Metabotropic 2 cell line (CB-80300-262) HEK 293-CNG-Slcla3 cell (CB-80200-238) Genbank Locus ID 2912 Human glutamate receptor, metabotropic 2 (NCBI protein database BAB19817)

USAGE

- cAMP assay for Gi-coupled human Glutamate Receptor, Metabotropic 2 (GRM2).
- HEK293-CNG-Slcla3 cells (CB-80200-238) without transfected GRM2 are used as a negative control.

QUALITY CONTROL

- 1. This cell line has been tested negative for Mycoplasma sp.
- 2. This cell line has been tested positive for GRM2 specific response.
- 3. Surviving rate: More than 2.5 million/vial on the second day after thawing.
- 4. The receptor specific activity is stable for 10 weeks continuous passage.

CELL CULTURE CONDITION

- 1. Growth medium: 90% DMEM with Glutamax, 10% FBS, 250 μg/ml G418, 1 μg/ml puromycin and 5 μg/ml blasticidin
- 2. Freezing medium: 10% DMSO, 90% FBS

DATA EXAMPLE

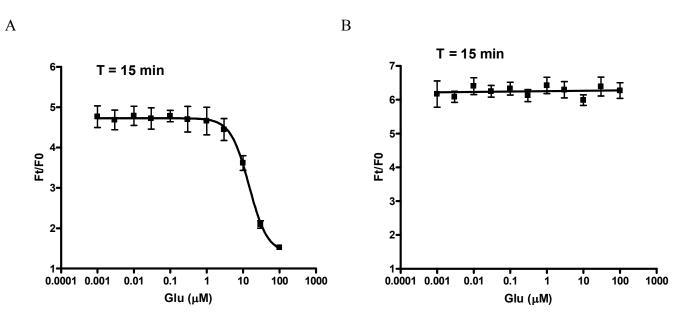


Figure 1. Response of ACTOne GRM2 cell line & parental cell line to Glutamic acid.

ACT*One* GRM2 cells and parental cells (CB-80200-200) were plated overnight in 20 μ l culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20 μ l/well of 1X Dye-loading solution (ACT*One* Membrane Potential Assay Kit). After 2 hours of incubation at room temperature, two readings were obtained prior to and 20 min after the addition of Glutamic acid. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of Glutamic acid in ACTOne GRM2 cell line. EC50 = 14.5 μM in the presence of PDE inhibitor Ro20-1724 and β-adrenoceptor agonist isoproterenol.
- B. Parental cells do not respond to Glutamic acid.