

DATA SHEET

CELL LINE DESIGNATION
ORIGIN (PARENTAL CELL)
GENE INTRODUCED
RECEPTOR INTRODUCED:

Glutamate Receptor, Metabotropic 4 cell line (CB-80300-269)
HEK 293-CNG-Slcla3 cell (CB-80200-238)
Genbank LocusID 2914
Human glutamate receptor, metabotropic 4 (NCBI protein database NP_000832.1)

USAGE

- cAMP assay for Gi-coupled human glutamate receptor, metabotropic 4 (GRM4).
- HEK293-CNG-Slcla3 cells (CB-80200-238) without transfected GRM4 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 GRM4 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

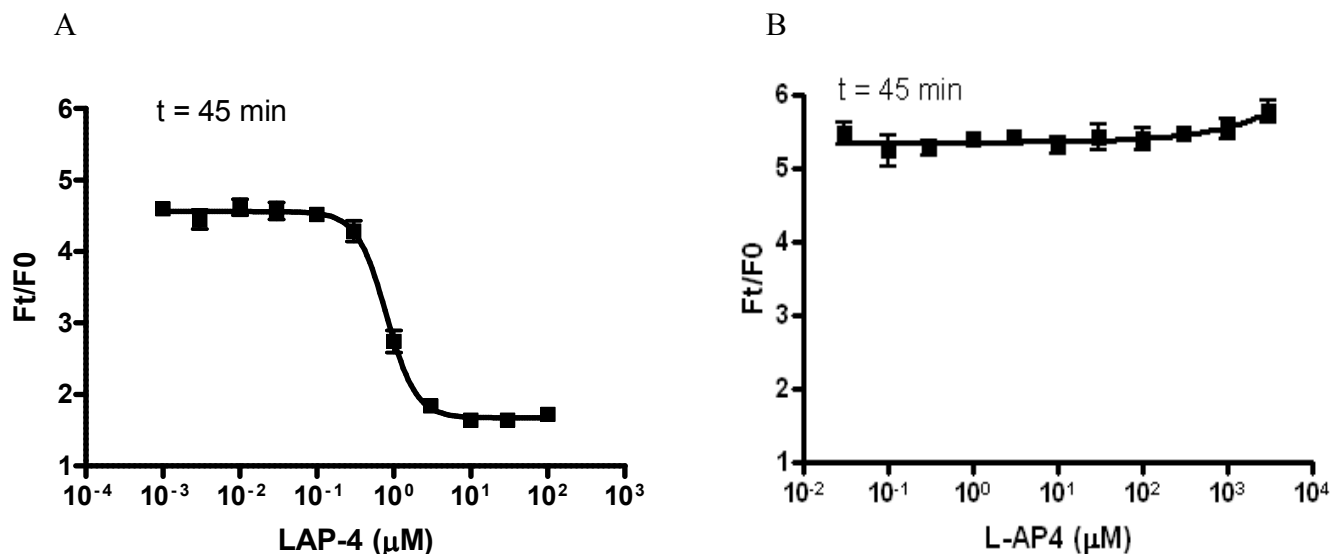


Figure 1. Response of ACTOne GRM4 cell line & parental cell line to L-(+)-2-Amino-4-phosphonobutyric acid.

ACTOne GRM4 cells and parental cells (CB-80200-238) were plated overnight in 20 µl culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20 µl/well of 1X Dye-loading solution (ACTOne Membrane Potential Assay Kit). After 2 hours of incubation at room temperature, two readings were obtained prior to and 45 min after the addition of L-(+)-2-Amino-4-phosphonobutyric acid. Ratios of the two readings (F/F₀) are plotted in the figure.

- A. Dose response curve of L-(+)-2-Amino-4-phosphonobutyric acid in ACTOne GRM4 cell line. EC₅₀ = 0.80 µM in the presence of PDE inhibitor Ro20-1724 and β-adrenoceptor agonist isoproterenol.**
- B. Parental cells do not respond to L-(+)-2-Amino-4-phosphonobutyric acid.**