

DATA SHEET

Catalog #	AG-10300-259
Cell Line Designation	Glutamate Receptor, Metabotropic 7 cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human Glutamate Receptor, Metabotropic 7 (GRM7)
NCBI Accession #	NP_000835

USAGE

- cAMP assay for Gi-coupled human glutamate receptor, metabotropic 7 (GRM7).
- HEK293-CNG-Slca3 cells (AG-10200-238) without transfected GRM7 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 GRM7 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% complete medium

DATA EXAMPLE

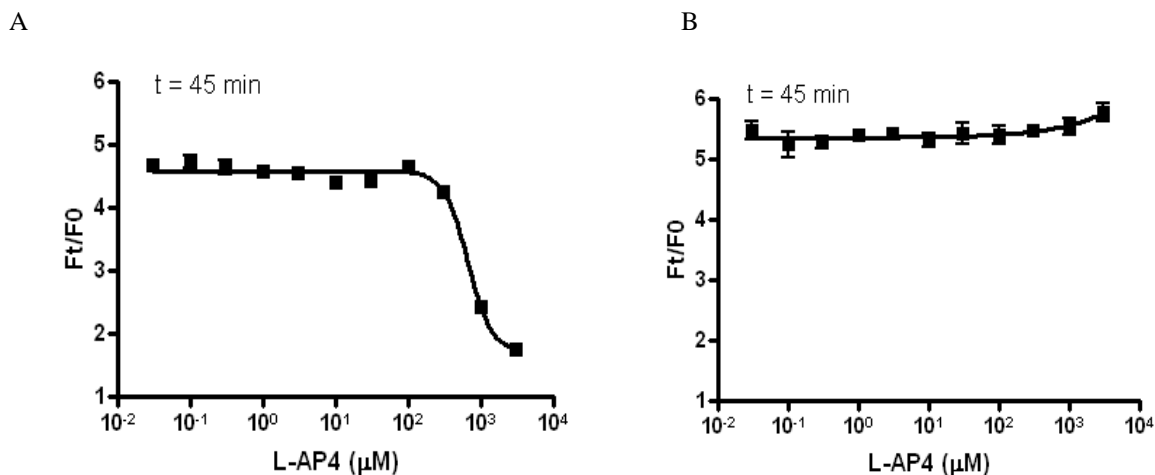


Figure 1. Response of ACTOne GRM7 cell line & parental cell line to L-(+)-2-Amino-4-phosphonobutyric acid.

ACTOne GRM7 cells and parental cells (Cat# 344443) were plated overnight in 20 ml culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20 ml/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 GRM7 cell line. EC₅₀ = 657 mM in the presence of PDE inhibitor Ro20-1724 and b-adrenoceptor agonist isoproterenol.**
- B. Parental cells do not respond to L-(+)-2-Amino-4-phosphonobutyric acid.**