

## DATA SHEET

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

Glutamate Receptor, Metabotropic 7 cell line (CB-80300-259)  
HEK 293-CNG-Slcla3 cell (CB-80200-238)  
Genbank LocusID 2917  
Human glutamate receptor, metabotropic 7 (NCBI protein database AAB51763.1)

### USAGE

- cAMP assay for Gi-coupled human glutamate receptor, metabotropic 7 (GRM7).
- HEK293-CNG-Slcla3 cells (CB-80200-238) without transfected GRM7 are used as a negative control.

### QUALITY CONTROL

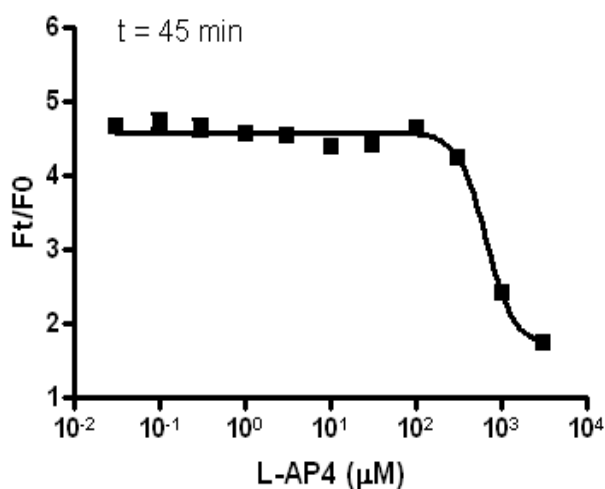
1. This cell line has been tested negative for *Mycoplasma sp.*
2. This cell line has been tested positive for GRM7 specific response.
3. Surviving rate: More than 2.5 million/vial on the second day after thawing.
4. The receptor specific activity is stable for 10 weeks continuous passage.

### CELL CULTURE CONDITION

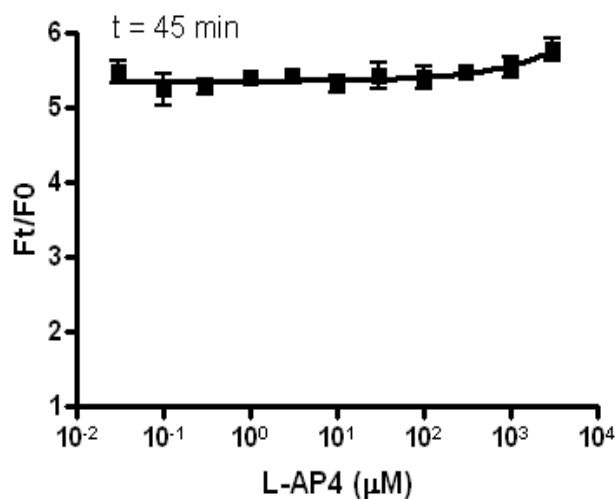
1. Growth medium: 90% DMEM with Glutamax, 10% FBS, 250  $\mu\text{g/ml}$  G418, 1  $\mu\text{g/ml}$  puromycin and 5  $\mu\text{g/ml}$  blasticidin
2. Freezing medium: 10% DMSO, 90% FBS

### DATA EXAMPLE

A



B



#### 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  $\mu\text{l}$  culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20  $\mu\text{l}$ /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  $\mu\text{M}$  in the presence of PDE inhibitor Ro20-1724 and  $\beta$ -adrenoceptor agonist isoproterenol.
- B. Parental cells do not respond to L-(+)-2-Amino-4-phosphonobutyric acid.