

## DATA SHEET

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

Opioid Receptor, Mu 1 cell line (CB-80300-268)  
HEK 293-CNG cell (CB-80200-200)  
Genbank Locus ID 4988  
Human Opioid Receptor, Mu 1 (NCBI protein database  
AAS83107)

### USAGE

- cAMP assay for Gi-coupled human Opioid Receptor, Mu 1 (OPRM1).
- HEK293-CNG cells (CB-80200-200) without transfected Opioid Receptor, Mu 1 are used as a negative control.

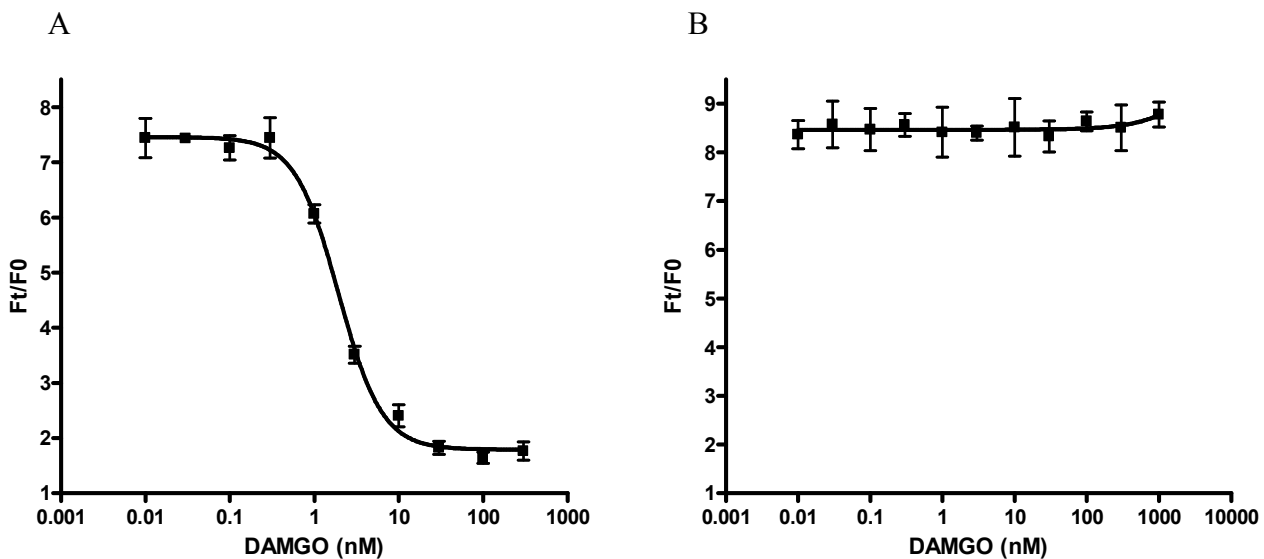
### QUALITY CONTROL

1. This cell line has been tested negative for *Mycoplasma sp.*
2. This cell line has been tested positive for Opioid Receptor, Mu 1 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, 10% FBS, 250 µg/ml G418 and 1 µg/ml puromycin
2. Freezing medium: 10% DMSO, 90% FBS

### DATA EXAMPLE



**Figure 1. Response of ACTOne OPRM1 cell line & parental cell line to DAMGO.**

ACTOne OPRM1 cells and parental cells (CB-80200-200) 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 DAMGO. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of DAMGO in ACTOne OPRM1 cell line. EC50 = 1.9 nM in the presence of PDE inhibitor Ro20-1724 and β-adrenoceptor agonist isoproterenol.**
- B. Parental cells do not respond to DAMGO.**