

DATA SHEET

Catalog #	AG-10300-268
Cell Line Designation	Opioid Receptor, Mu 1 cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human Opioid Receptor, Mu 1 (OPRM1)
NCBI Accession #	NP_000905

USAGE

- cAMP assay for Gi-coupled human Opioid Receptor, Mu 1 (OPRM1).
- HEK293-CNG cells (AG-10200-200) 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 μ g/ml G418 and 1 μ g/ml puromycin
2. Freezing medium: 10% DMSO, 90% complete medium

DATA EXAMPLE

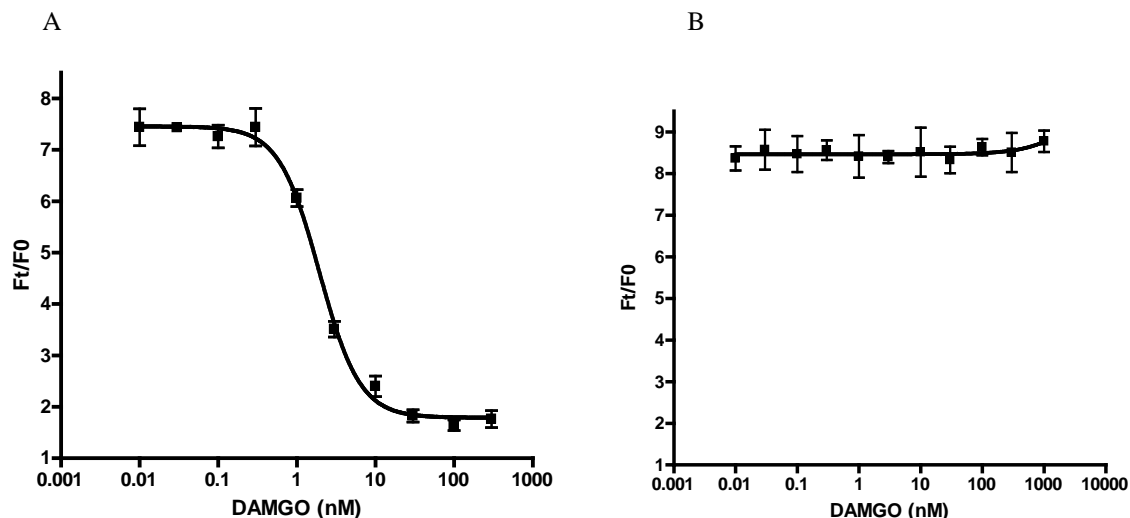


Figure 1. Response of ACTOne OPRM1 cell line & parental cell line to DAMGO.

ACTOne OPRM1 cells and parental cells (AG-10200-200) 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 DAMGO. Ratios of the two readings (Ft/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.**