DATA SHEET

Catalog #	AG-10300-266
Cell Line Designation	Opiate receptor- like 1 cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human Opiate receptor- like 1 (OPRL1)
NCBI Accession #	NP 000904
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USAGE

- cAMP assay for Gi-coupled human Opiate receptor- like 1 (OPRL1).
- HEK293-CNG cells (AG-10200-200) without transfected Opiate receptor- like 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 Opiate receptor- like 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% complete medium

DATA EXAMPLE

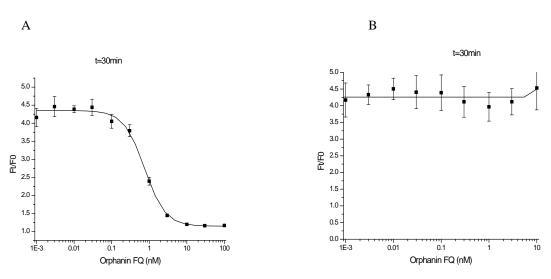


Figure 1. Response of ACTOne OPRL1 cell line & parental cell line to Orphanin FQ.

ACT*One* OPRL1 cells and parental cells (Cat# 341467) 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 (ACT*One* Membrane Potential Assay Kit). After 2 hours of incubation at room temperature, two readings were obtained prior to and 30 min after the addition of Orphanin FQ. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of Orphanin FQ in ACT*One* OPRL1 cell line. EC50 = 0.75 nM in the presence of PDE inhibitor Ro20-1724 and b-adrenoceptor agonist isoproterenol.
- B. Parental cells do not respond to Orphanin FQ.