DATA SHEET

Catalog #	AG-10200-215
Cell Line Designation	Melanocortin 5 Receptor cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human Melanocortin 5 receptor (MC5R)
NCBI Accession #	NP_005904

USAGE

- cAMP assay for Gs-coupled human Melanocortin 5 Receptor (MC5R).
- HEK293-CNG cells (AG-10200-200) without transfected Melanocortin 5 Receptor 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 Melanocortin 5 Receptor 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

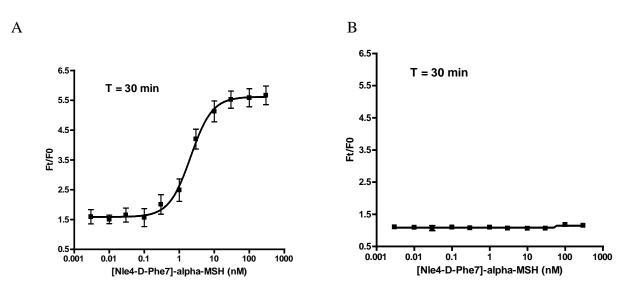


Figure 1. Response of ACTOne MC5R cell line & parental cell line to [Nle4, D-Phe7] a-MSH.

ACT*One* MC5R 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 (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 [Nle4, D-Phe7] a-MSH. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of [Nle4, D-Phe7] a-MSH, in ACT*One* MC5R cell line. $EC_{50} = 2.1$ nM in the presence of PDE inhibitor, Ro 20-1724.
- B. Parental cells do not respond to [Nle4, D-Phe7] a-MSH.