DATA SHEET

Catalog #	AG-10200-257
Cell Line Designation	Melanocortin 1 Receptor cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human Melanocortin 1 Receptor (MC1R)
NCBI Accession #	NP_002377

USAGE

- cAMP assay for Gs-coupled human Melanocortin 1 Receptor (MC1R).
- HEK293-CNG cells (AG-10200-200) without transfected Melanocortin 1 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 1 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

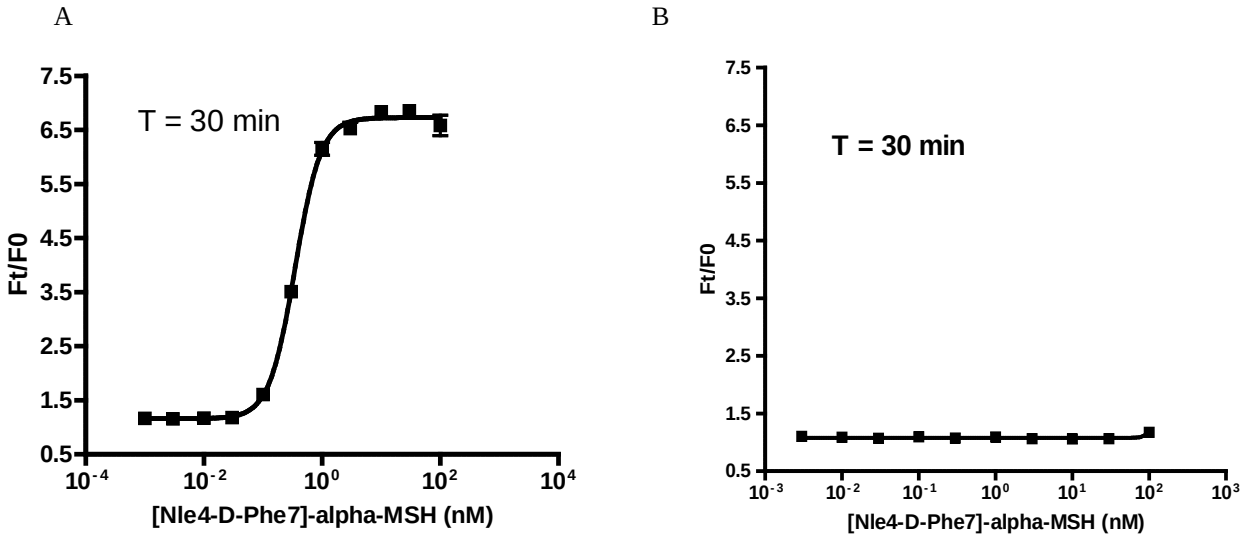

Figure 1. Response of ACT*One* MC1R cell line & parental cell line to [Nle4, D-Phe7] a-MSH.

ACT*One* MC1R 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* MC1R cell line. EC50 = 0.35 nM in the presence of PDE inhibitor Ro20-1724.

B. Parental cells do not respond to [Nle4, D-Phe7] a-MSH.