

DATA SHEET

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

Melanocortin 1 Receptor cell line (CB-80200-257)
HEK 293-CNG cell (CB-80200-200)
Genbank Locus ID 4157
Human Melanocortin 1 Receptor (NCBI protein database AF153431)

USAGE

- cAMP assay for Gs-coupled human Melanocortin 1 Receptor (MC1R).
- HEK293-CNG cells (CB-80200-200) 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% FBS

DATA EXAMPLE

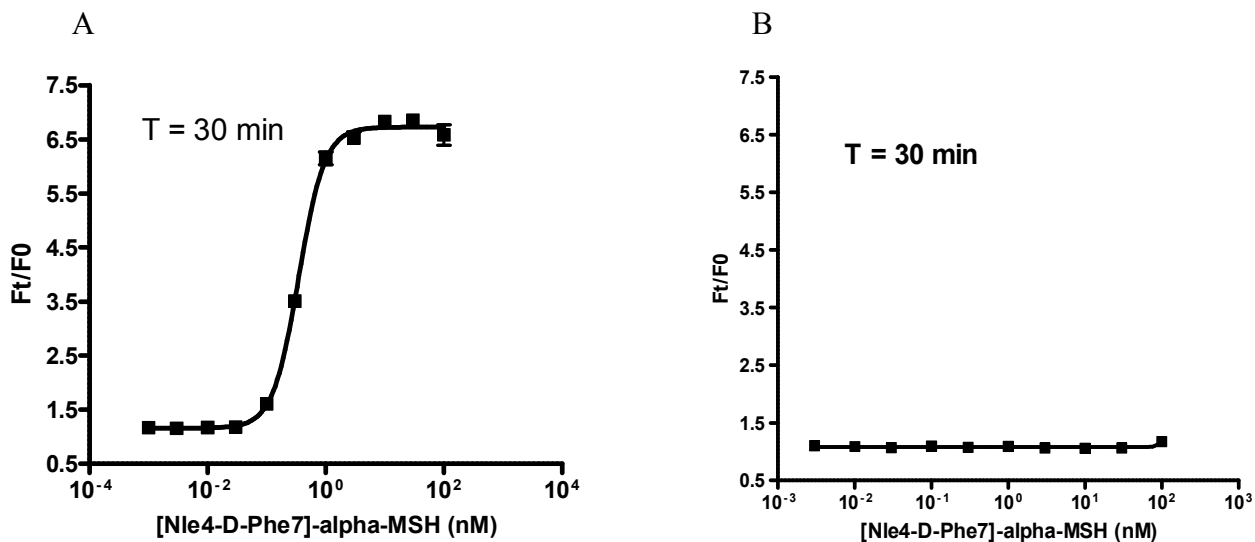


Figure 1. Response of ACTOne MC1R cell line & parental cell line to [Nle4, D-Phe7] α -MSH.

ACTOne MC1R 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 30 min after the addition of [Nle4, D-Phe7] α -MSH. Ratios of the two readings (Ft/F0) are plotted in the figure.

- A. Dose response curve of [Nle4, D-Phe7] α -MSH in ACTOne 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] α -MSH.**