

Caution: For Laboratory Use. A research reagent for research purposes only

## Human Melanocortin MC4 Receptor, $\gamma$ -Irradiated Frozen Cells

**Product No.:** ES-191-CF

**Lot No.:** 2561

### Material Provided

<b>Cells:</b>	1 x 1 mL frozen aliquot
<b>Format:</b>	~2.5 x 10 <sup>6</sup> cells / mL in Ham's F12, 10% FBS with 10 % DMSO

### Product Information

<b>Cellular Background:</b>	CHO-K1
<b>Frozen cells info:</b>	Frozen recombinant, $\gamma$ -irradiated CHO-K1 cells expressing the Human Melanocortin MC4 receptor.
<b>DNA Sequence:</b>	Identical to coding sequence of GenBank NM_005912.2.
<b>Corresponding Protein Sequence:</b>	Identical to GenBank NP_005903.2.
<b>Storage Conditions:</b>	Store in liquid nitrogen (vapor phase) immediately upon receipt, or maximum 15 days at -80°C. cAMPZen® is designed for single use only. Do not refreeze.

### Quality Control

EC<sub>50</sub> for a reference agonist is determined using a LANCE® cAMP assay (Figure 1). Mycoplasma test is performed using MycoAlert® Mycoplasma detection kit. We certify that these results meet our quality release criteria.

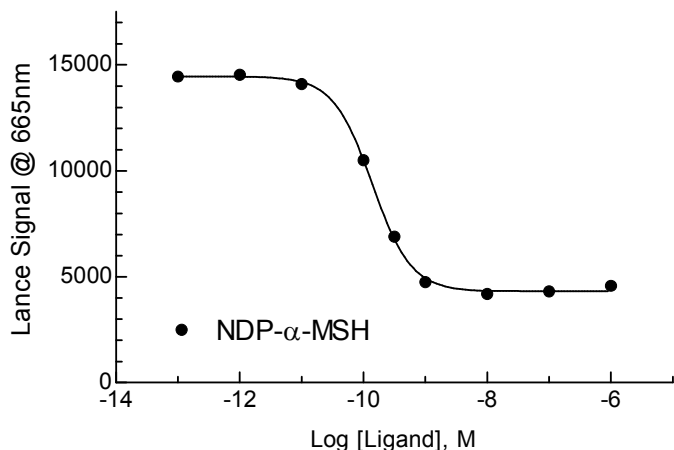
<b>NDP-<math>\alpha</math>-MSH - (EC<sub>50</sub>):</b>	0.054 nM
<b>Mycoplasma:</b>	This cell line tested negative for Mycoplasma.

## Recommended Use and Thawing Conditions

**Assay Medium:** HBSS 1X (without phenol red); 5 mM HEPES; BSA-stabilizer (7.5% solution); 0.5 mM IBMX (pH 7.4).

**Thawing Cells:** Using appropriate personal protective equipment, place the frozen aliquot in a 37°C water bath and agitate until its content is thawed completely. Immediately remove from water bath, transfer content to 10 mL assay medium and centrifuge (150 x g, 5 min). Resuspend cell pellet in appropriate volume of assay medium for use in the selected LANCE<sup>®</sup> cAMP assay (see LANCE<sup>®</sup> cAMP Assays section).

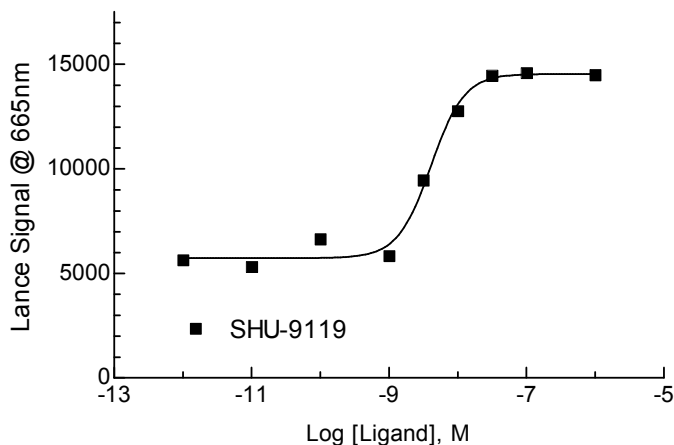
## Typical Product Data



Agonist	EC <sub>50</sub> (M)
NDP-α-MSH	1.4 x 10 <sup>-10</sup>

**Figure 1: Agonist Response in LANCE<sup>®</sup> cAMP assay**

An agonist dose-response experiment was performed in 384-well format using 2 500 cells/well. Cell stimulation was performed for 30 min at room temperature. Reader: EnVision<sup>®</sup>. Data from a representative experiment are shown.



Antagonist	IC <sub>50</sub> (M)
SHU-9119	4.1 x 10 <sup>-9</sup>

**Figure 2: Antagonist Response in LANCE<sup>®</sup> cAMP assay**

An antagonist dose-response experiment was performed in 384-well format using 2 500 cells/well and 0.5 nM NDP-α-MSH (reference agonist). Cell stimulation was performed for 10 min at room temperature. Reader: EnVision<sup>®</sup>. Data from a representative experiment are shown.

**Table 1. References of compounds used for functional characterization**

Name	Provider	Cat n°	Working Stock Solution
(Nle4, D-Phe7)- $\alpha$ -MSH (NDP- $\alpha$ -MSH)	Bachem	H-1100	10 mM in water
SHU-9119	Bachem	H-3952	10 mM in water

## LANCE<sup>®</sup> cAMP Assays

**LANCE<sup>®</sup> Ultra cAMP** - please refer to the user manual included with the LANCE<sup>®</sup> Ultra cAMP kits:

**TRF0262 – 1 000 Assay points**

**TRF0263 – 10 000 Assay points**

**TRF0264 – 50 000 Assay points**

**LANCE<sup>®</sup> cAMP** - please refer to the user manual included with the LANCE<sup>®</sup> cAMP kits:

**AD0262 – 500 Assay points**

**AD0262E – 1 000 Assay points**

**AD0263 – 10 000 Assay points**

**AD0264 – 50 000 Assay points**

## Suggested Materials and Instrumentation

Please visit our website

[www.perkinelmer.com/CellLines](http://www.perkinelmer.com/CellLines)

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