

DATA SHEET

CELL LINE DESIGNATION
ORIGIN (PARENTAL CELL)
GENE INTRODUCED

Phosphodiesterase 4 cell line (CB-81200-100)
HEK 293-CNG cell (CB-80200-200)
Constitutively active Gs coupled GPCR gene

USAGE

- cAMP assay for endogenous human phosphodiesterase 4 (PDE4).
- HEK293-CNG cells (CB-80200-200) 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 PDE4 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 $\mu\text{g/ml}$ G418 and 1 $\mu\text{g/ml}$ puromycin
2. Freezing medium: 10% 90% complete cell culture medium.

DATA EXAMPLE

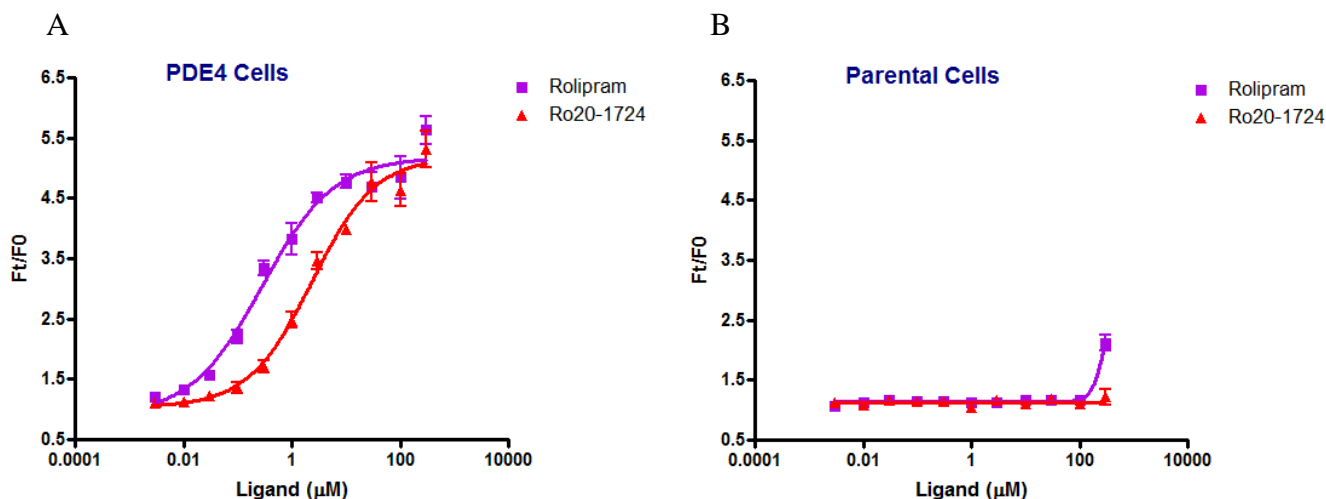


Figure 1. Response of ACTOne PDE4 cell line & parental cell line to Rolipram and Ro20-1724.

ACTOne PDE4 cells and parental cells (CB-80200-200) were plated overnight in 20 μl culture medium on a 384 well Biocoat plate. The next day, cells were dye-loaded with 20 $\mu\text{l/well}$ of ACTOne membrane potential dye. After 2 hour of incubation at room temperature, baseline was recorded using a FlexStation (Molecular Devices) (F0). 10 μl of PDE inhibitors at various concentrations were added to the cell plate, and the data was recorded 30 minutes (Ft) after drug addition. Dose response curves were generated by Prism.

A. Dose response curves of Rolipram and Ro20-1724 in ACTOne PDE4 cell line. IC50 = 0.28 μM for Rolipram and IC50 = 2.34 μM for Ro20-1724.

B. Parental cells do not respond to Rolipram or Ro20-1724.