

DATA SHEET

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

Phosphodiesterase 4D cell line (CB-81200-107)
CHO-K1-CNG-cells (CB-81300-100)
Genbank Locus ID 5144
Human phosphodiesterase 4D (NCBI protein NP_001184152.1)

USAGE

- cAMP assay for recombinant human phosphodiesterase 4D (PDE4D).
- CHO-K1-CNG-cells (CB-81300-100) 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 PDE4D 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. Dulbecco's Modified Eagle's Medium/Nutrient Mixture F-12 Ham-10%FBS supplemented with 250 µg/ml G418, 1 µg/ml Puromycin and 5 µg/ml blasticidin.
2. Freezing medium: 10% DMSO, 90% complete cell culture medium

DATA EXAMPLE

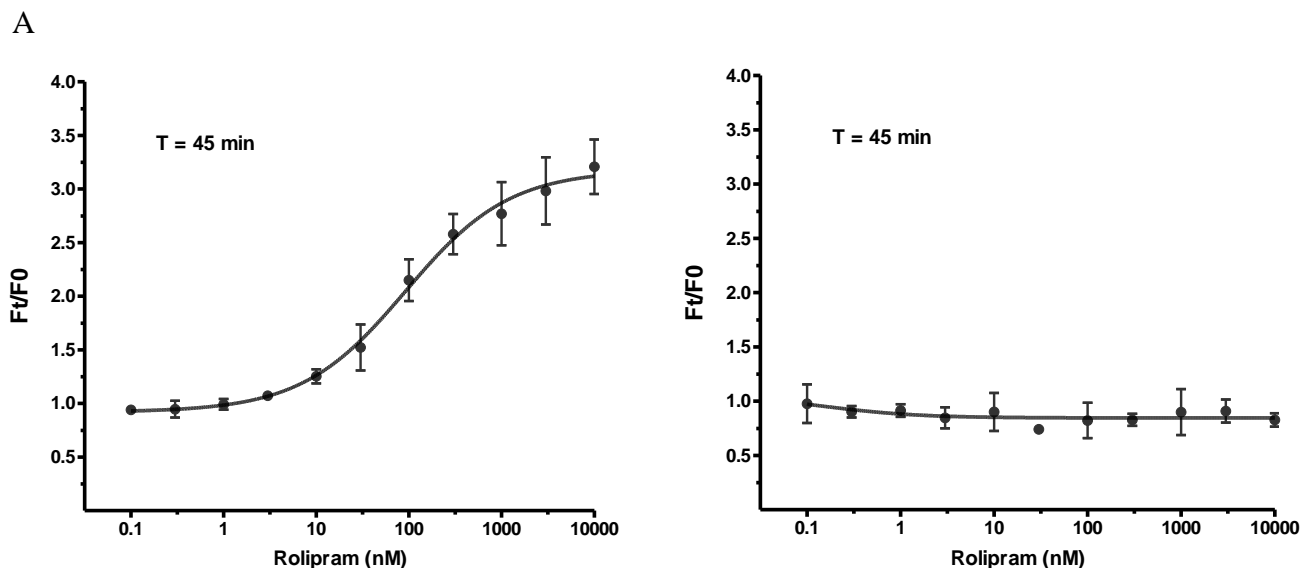


Figure 1. Response of ACTOne cAMP-PDE4D cell line & parental cell line to Rolipram

ACTOne cAMP-PDE4D cells and parental cells (CB-81300-100) were plated overnight in 20 µl culture medium on a 384 well microplate. The next day, cells were dye-loaded with 20 µl/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 45 minutes (F_t) after drug addition. Dose response curves were generated by Prism.

A. Dose response curve of Rolipram in ACTOne cAMP-PDE4D cell line. IC₅₀ = 92 nM in the presence of 3 µM of Forskolin

B. Parental cells do not respond to Rolipram in the presence of 3 µM of Forskolin