

DATA SHEET

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

Phosphodiesterase 4B cell line (CB-81200-106)
CHO-K1-CNG-cells (CB-81300-100)
Genbank Locus ID 5142
Human phosphodiesterase 4B (NCBI protein database NP_002591.2)

USAGE

- cAMP assay for recombinant human phosphodiesterase 4B (PDE4B).
- 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 PDE4B 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

A

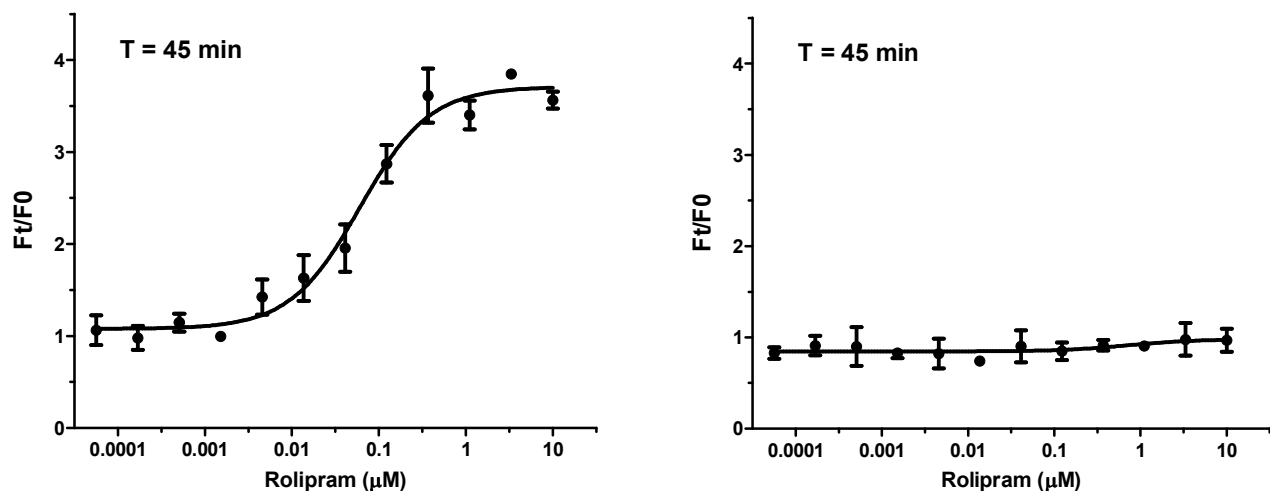


Figure 1. Response of ACTOne cAMP-PDE4B cell line & parental cell line to Rolipram

ACTOne cAMP-PDE4B 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 (with 15 µM Forskolin) were added to the cell plate, and the data was recorded 60 minutes (F_t) after drug addition. Dose response curves were generated by Prism.

- A. Dose response curve of Rolipram in ACTOne cAMP-PDE4B cell line. IC₅₀ =60.3 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**