

DATA SHEET

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

Phosphodiesterase 9A cell line (CB-81300-101)
CHO-CNG-sGC cells (CB-81300-100)
Genbank Locus ID 5152
Human phosphodiesterase 9A (NCBI protein database
NP_001001567)

USAGE

- cGMP assay for recombinant human phosphodiesterase 9A (PDE9A).
- CHO-CNG-sGC 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 PDE9A 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

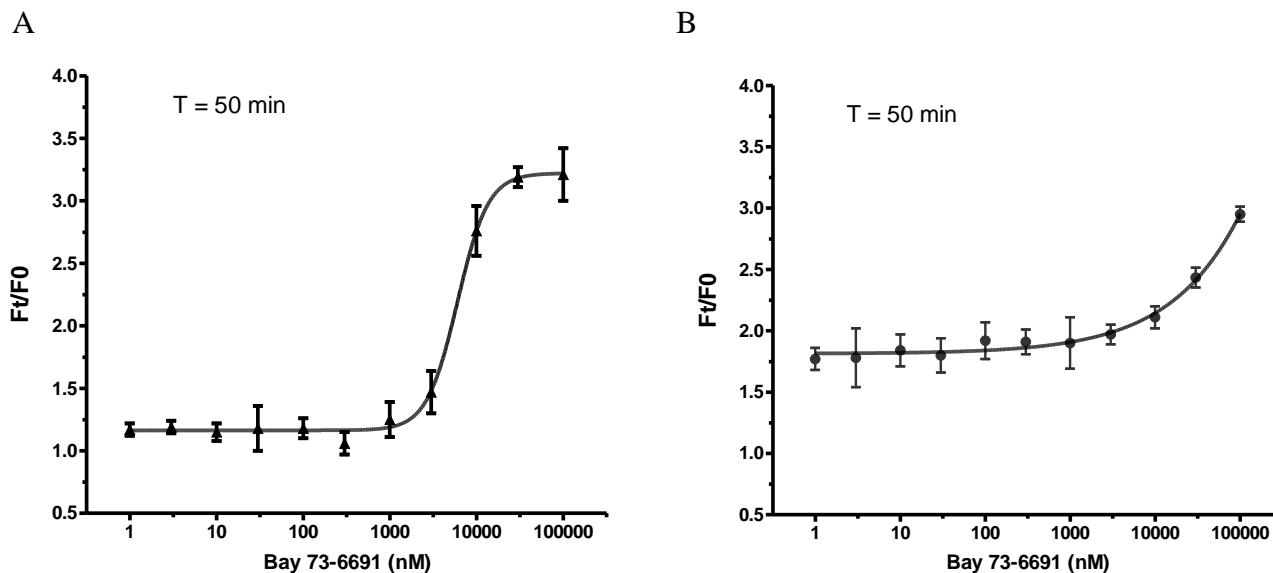


Figure 1. Response of ACTOne cGMP-PDE9A cell line & parental cell line to Bay 73-6691

ACTOne cGMP-PDE9A 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 125 µM Bay41-2272) were added to the cell plate, and the data was recorded 50 minutes (Ft) after drug addition. Dose response curves were generated by Prism.

- A. Dose response curve of Bay 73-6691 in ACTOne cGMP-PDE9A cell line. IC50 = 6.1 µM in the presence of 25 µM Bay 41-2272**
- B. Parental cells do not respond to Bay 73-6691 in the presence of 25 µM Bay 41-2272**