

DATA SHEET

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

Dopamine receptor D1 cell line (CB-80200-218)
HEK 293-CNG cell (CB-80200-200)
Genbank LocusID 1812
Human Dopamine receptor D1 (NCBI protein database NP_000785.1)

USAGE

- cAMP assay for Gs-coupled human Dopamine receptor D1 (DRD1).
- HEK293-CNG cells (CB-80200-200) without transfected Dopamine receptor D1 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 Dopamine receptor D1 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% DMSO, 90% FBS

DATA EXAMPLE

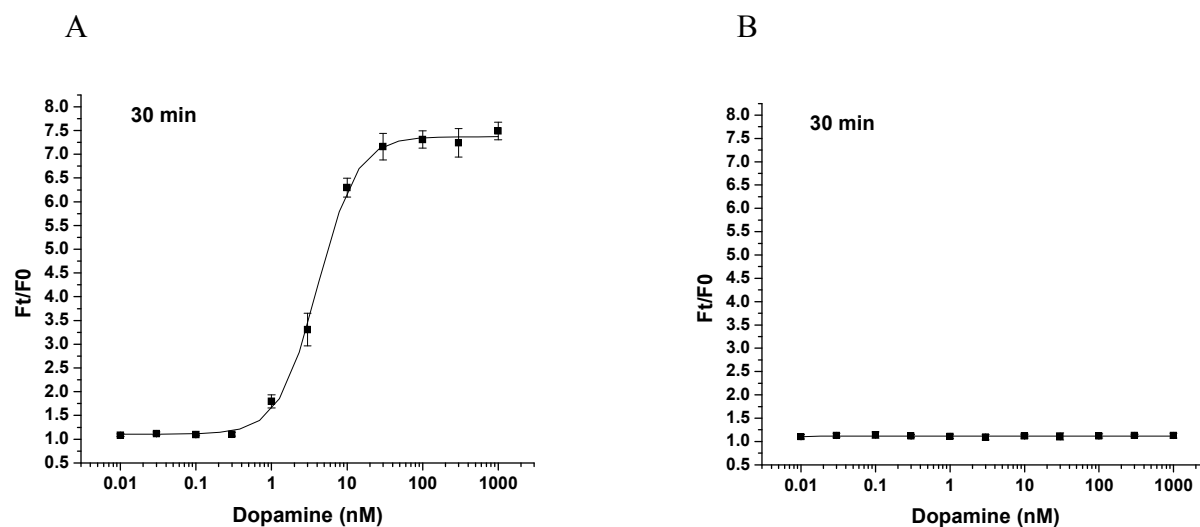


Figure 1. Response of ACTOne DRD1 cell line & parental cell line to Dopamine.

ACTOne DRD1 cells and parental cells (CB-80200-200) were plated overnight in 20 μl culture medium on a BD Biotect 384 well plate. The next day, cells were dye-loaded with 20 $\mu\text{l/well}$ of 1X Dye-loading solution (ACTOne Membrane Potential Assay Kit). After 2 hours of incubation at room temperature, two readings were obtained prior to and 30 min after the addition of Dopamine. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of Dopamine in ACTOne DRD1 cell line. EC50 =4.1 nM in the presence of PDE inhibitor Ro20-1724**
- B. Parental cells do not respond to Dopamine.**