

DATA SHEET

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

Dopamine Receptor D2 cell line (CB-80300-206)
HEK 293-CNG cell (CB-80200-200)
Genbank LocusID 1813
Human dopamine receptor D2 (NCBI protein database NP_057658.1)

USAGE

- cAMP assay for Gi-coupled human Dopamine Receptor D2 (DRD2).
- HEK293-CNG cells (CB-80200-200) without transfected Dopamine Receptor D2 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 D2 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 µg/ml G418 and 1 µg/ml puromycin
2. Freezing medium: 10% DMSO, 90% FBS

DATA EXAMPLE

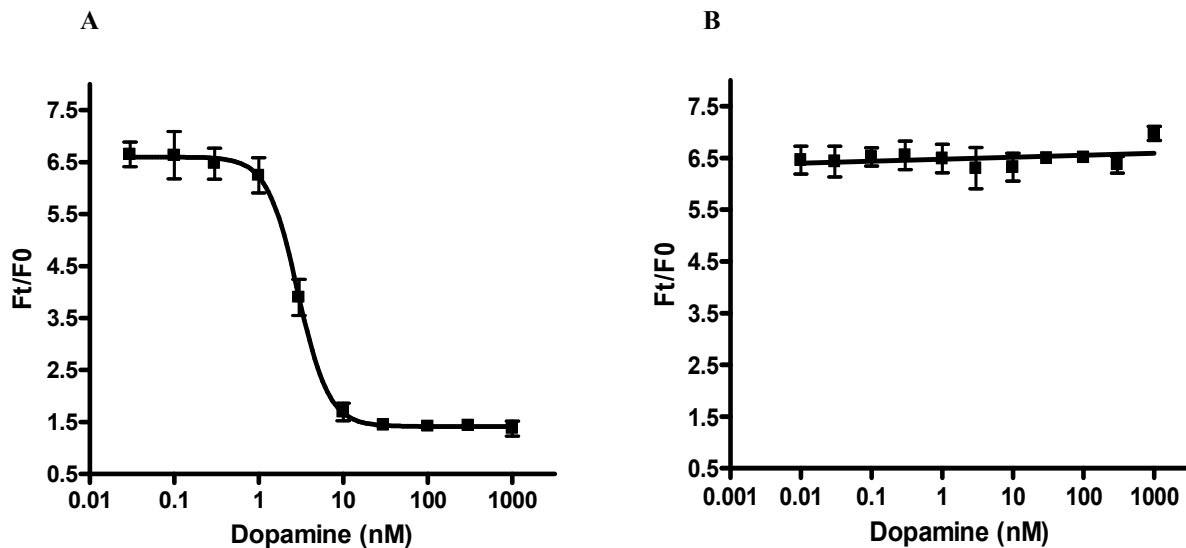


Figure 1. Dose response curve of dopamine in ACTOne DRD2 cell line.

ACTOne DRD2 and parental cells (CB-80200-200) were plated overnight in 20 µl culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20 µl/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 (Ft/F0) are plotted in the figure.

- A. Dose response curve of Dopamine in ACTOne DRD2 cell line. EC50 = 2.8 nM in the presence of 25 µM of PDE inhibitor Ro20-1724 and 300 nM of β-adrenoceptor agonist isoproterenol.**
- B. Parental cells do not respond to Dopamine.**