

DATA SHEET

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

Adrenergic, beta-2-, receptor cell line (CB-80200-253)
HEK 293-CNG cell (CB-80200-200)
Genbank LocusID 154
Human Adrenergic, beta--2, receptor (NCBI protein database
AAA88017.1)

USAGE

- cAMP assay for Gs-coupled human Adrenergic, beta-2-, receptor (ADRB2)
- HEK293-CNG cells (CB-80200-200) without transfected Adrenergic, beta-2-, receptor 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 Adrenergic, beta-2-, receptor 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

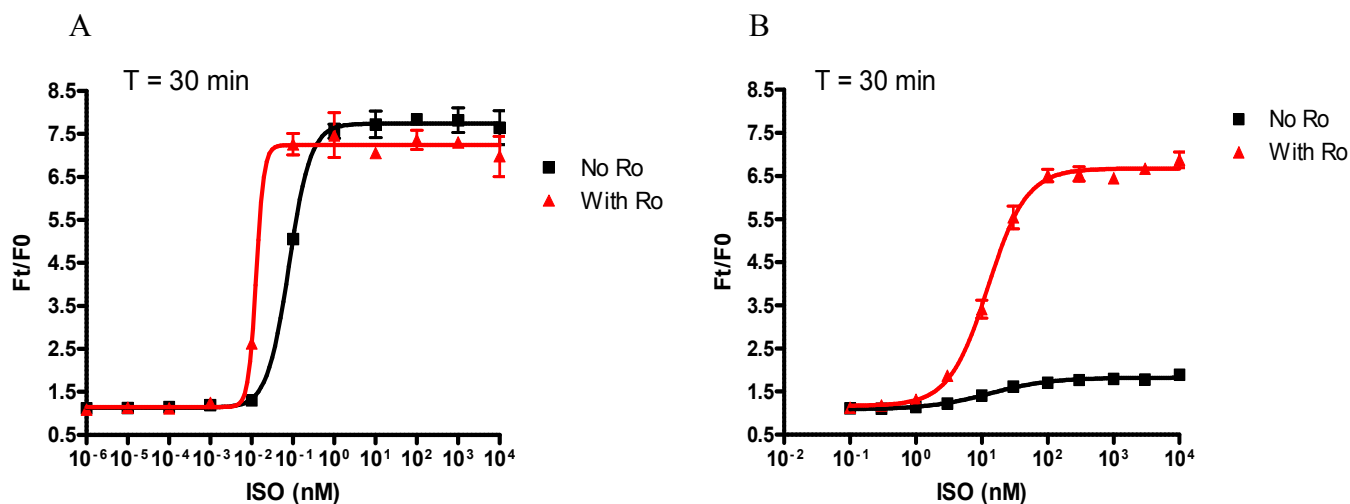


Figure 1. Response of ACTOne ADRB2 cell line & parental cell line to Isoproterenol.

ACTOne ADRB1 cells and parental cells (CB80200-200) 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 the ligands. Ratios of the two readings (Ft/F0) are plotted in the figure.

- A. Dose response curves of Isoproterenol in ACTOne ADRB2 cell line. EC50 = 12.8 pM in the presence of 25 µM of PDE inhibitor Ro20-1724 and EC50 = 79.9 pM in the absence of PDE inhibitor Ro20-1724**
- B. EC50 of Isoproterenol is 12.39 nM in the parental cells in the presence of 25 µM of PDE inhibitor Ro20-1724. In the absence of PDE inhibitor, there is not much response to Isoproterenol in the parental cells**