

DATA SHEET

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

Adrenergic, beta-1-, receptor cell line (CB80200-272)
HEK 293-CNG cell (CB80200-200)
Genbank Locus ID 153
Human adrenergic, beta-1-, receptor (NCBI protein database NP_000675.1)

USAGE

- cAMP assay for Gs-coupled human adrenergic, beta-1-, receptor.
- HEK293-CNG cells (CB80200-200) without transfected adrenergic, beta-1-, 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-1-, receptor specific response.
3. Surviving rate: More than 2.0 million/vial on the second day after thawing.

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

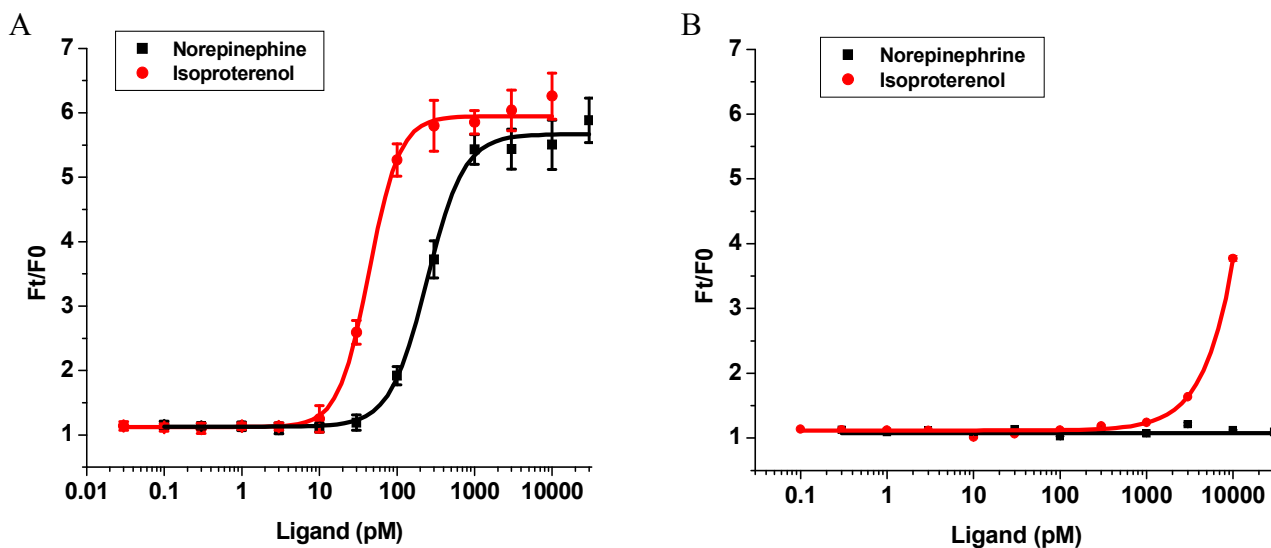


Figure 1. Response of ACTOne ADRB1 cell line & parental cell line to Norepinephrine and Isoproterenol.

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 $\mu\text{l/well}$ 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 the ligands. Ratios of the two readings (F_t/F_0) are plotted in the figure.

- A. Dose response curve of Norepinephrine or Isoproterenol in ACTOne ADRB1 cell line. With Norepinephrine, $\text{EC}_{50} = 243 \text{ pM}$ in the presence of 25 μM of PDE inhibitor Ro20-1724; With Isoproterenol, $\text{EC}_{50} = 43.8 \text{ pM}$ in the presence of 25 μM of PDE inhibitor Ro20-1724**
- B. Parental cells do not respond to Norepinephrine. The Parental cells do not respond to Isoproterenol when it is lower than 1 nM.**