

DATA SHEET

CELL LINE DESIGNATION

Vasoactive Intestinal Peptide Receptor 2 cell line
(CB-80200-209)

ORIGIN (PARENTAL CELL)

HEK 293-CNG cell (CB-80200-200)

GENE INTRODUCED

Genbank LocusID 7434

RECEPTOR INTRODUCED:

Human Vasoactive Intestinal Peptide Receptor 2 (NCBI
protein database NP_003373)

USAGE

- cAMP assay for Gs-coupled human Vasoactive Intestinal Peptide Receptor 2 (VIPR2).
- HEK293-CNG cells (CB-80200-200) without transfected Vasoactive Intestinal Peptide Receptor 2 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 Vasoactive Intestinal Peptide Receptor 2 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

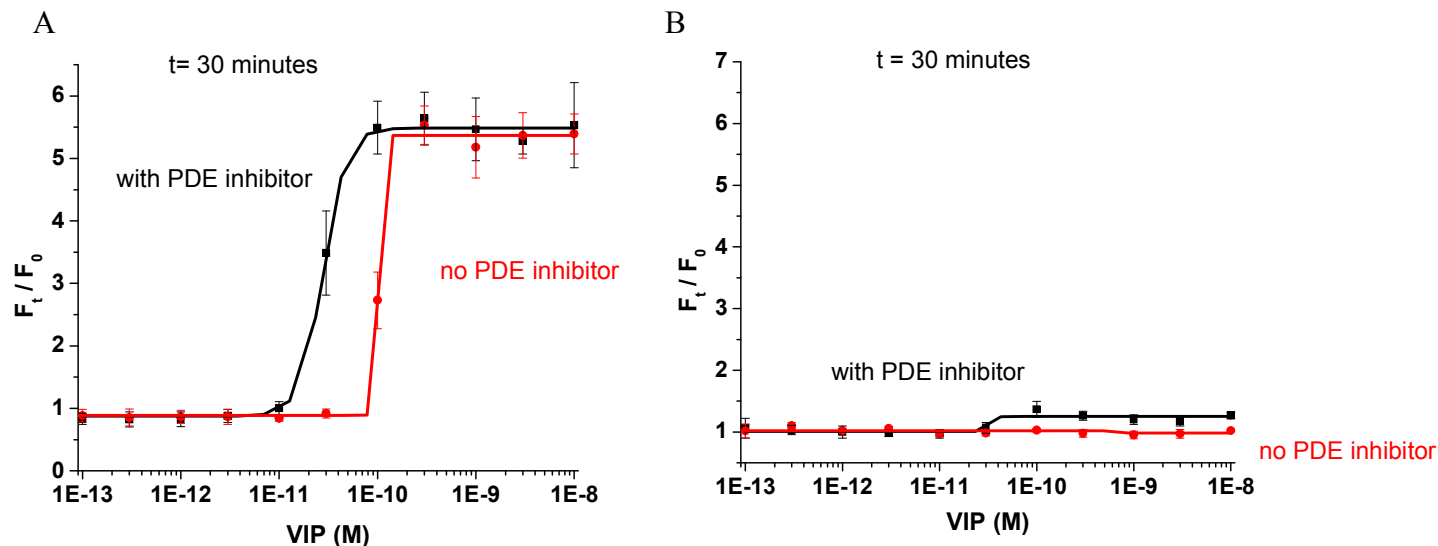


Figure 1. Response of ACTOne VIPR2 cell line & parental cell line to VIP.

ACTOne VIPR2 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 VIP. Ratios of the two readings (F_t/F_0) are plotted in the figure.

- A. Dose response curve of VIP in ACTOne VIPR2 cell line. $EC_{50} = 28 \text{ pM}$ in the presence of PDE inhibitor Ro20-1724, and $EC_{50} = 100 \text{ pM}$ in the absence of Ro20-1724.**
- B. Parental cells do not respond to VIP.**