

DATA SHEET

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

Calcitonin Receptor cell line (CB-80200-258)
HEK 293-CNG cell (CB-80200-200)
Genbank Locus ID 799
Human calcitonin receptor (NCBI protein database
NP_001733)

USAGE

- cAMP assay for Gs-coupled human Calcitonin Receptor (CALCR).
- HEK293-CNG cells (CB-80200-200) without transfected Calcitonin 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 Calcitonin 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

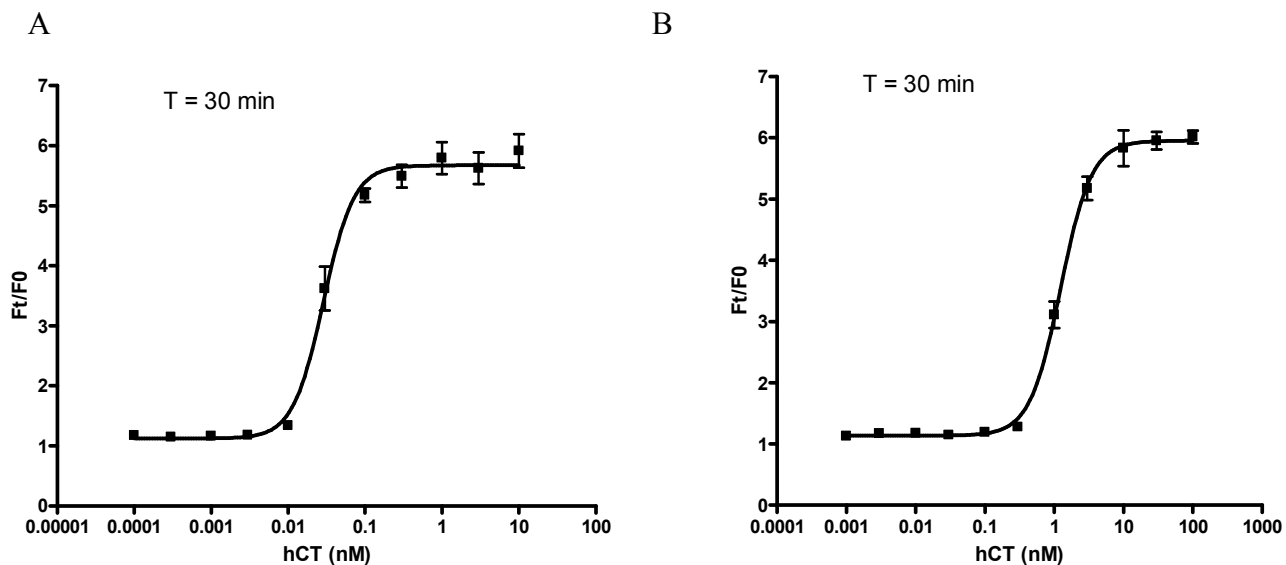


Figure 1. Response of ACTOne CALCR cell line & parental cell line to calcitonin.

ACTOne CALCR cells 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 calcitonin. Ratios of the two readings (F/F0) are plotted in the figure.

A. Dose response curve of calcitonin in ACTOne CALCR cell line. EC50 = 28.7 pM in the presence of PDE inhibitor Ro20-1724.

B. Dose response curve of human calcitonin in Parental cells. In the presence of PDE inhibitor Ro20-1724, EC50 = 1.24 nM.

Note. In CALCR cells, EC50 = 230 pM with rat Amy in the presence of Ro20-1724. In the parental cells, the response is negative when rAmy < 10 nM (in the presence of Ro20-1724)