

DATA SHEET

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

Glucagon Receptor cell line (CB-80200-217)
HEK 293-CNG cell (CB-80200-200)
Genbank Locus ID 2642
Human Glucagon Receptor (NCBI protein database P47871)

USAGE

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

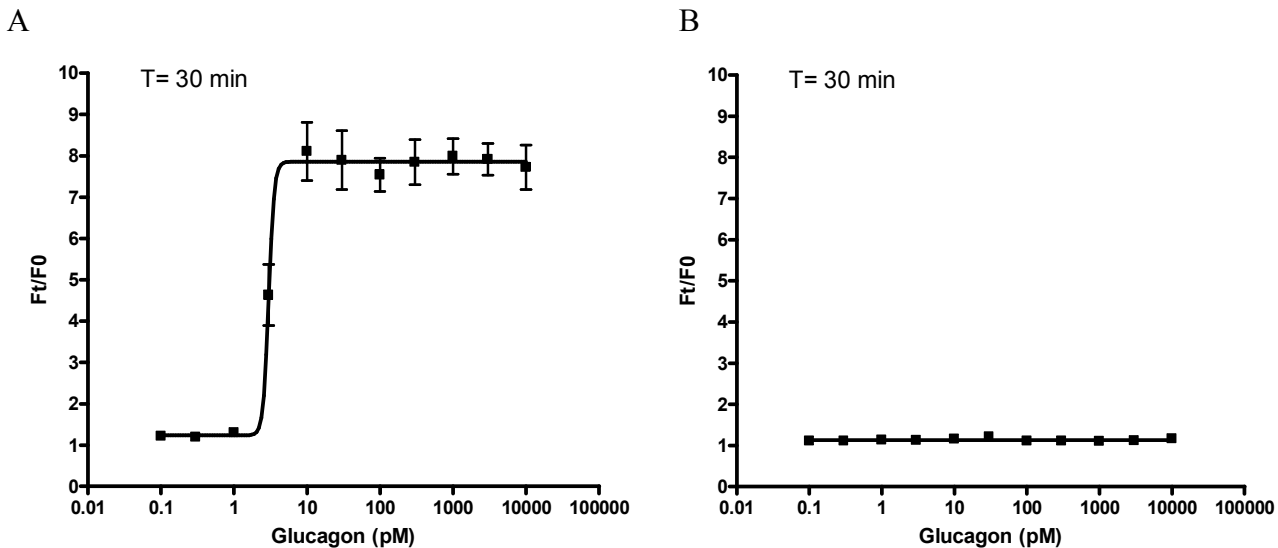


Figure 1. Response of ACTOne GCGR cell line & parental cell line to glucagon.

ACTOne GCGR 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 glucagon. Ratios of the two readings (Ft/F0) are plotted in the figure.

- A. Dose response curve of glucagon in ACTOne GCGR cell line. EC50 = 2.99 pM in the presence of PDE inhibitor Ro20-1724, and EC50 = 29.4 pM in the absence of Ro20-1724 (data not shown).**
- B. Parental cells do not respond to glucagon.**