

DATA SHEET

Catalog #	AG-10200-240
Cell Line Designation	5-hydroxytryptamine (serotonin) receptor 7B cell line
Parental Cell	HEK 293-CNG cell (AG-10200-200)
Gene Introduced	Human 5-hydroxytryptamine (serotonin) receptor 7B (HTR7B)
NCBI Accession #	NP_062874

USAGE

- cAMP assay for Gs-coupled human 5-hydroxytryptamine (serotonin) receptor 7B (HTR7B).
- HEK293-CNG cells (AG-10200-200) without transfected 5-hydroxytryptamine (serotonin) receptor 7B 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 5-hydroxytryptamine (serotonin) receptor 7B 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 for maintaining the cells: 90% DMEM, 10% FBS, 250 µg/ml G418 and 1 µg/ml puromycin
2. Growth medium for ACTOne Assay: 90% DMEM, 10% FBS (CHARCOAL STRIPPED), 250 µg/ml G418 and 1 µg/ml puromycin
3. Freezing medium: 10% DMSO, 90% complete medium

DATA EXAMPLE

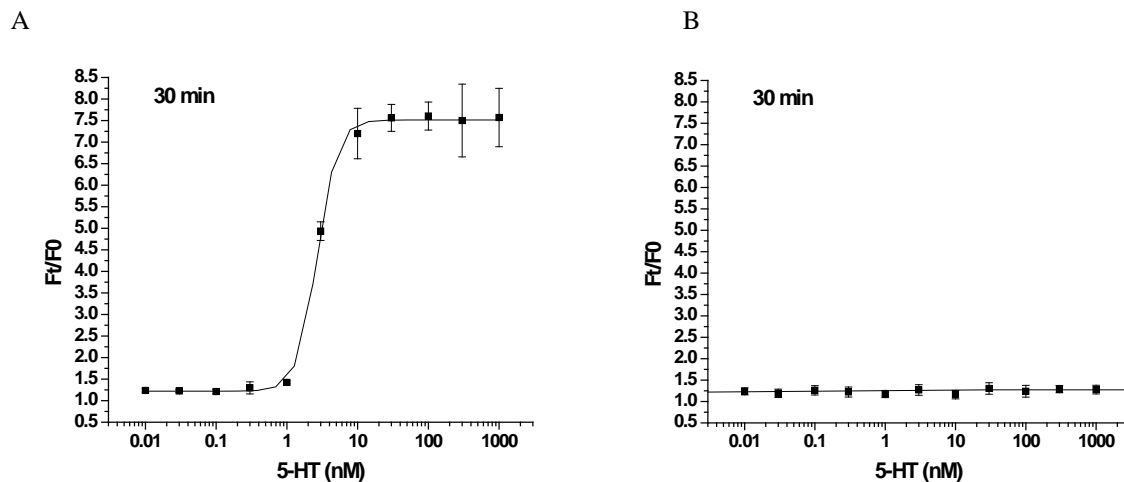


Figure 1. Response of ACTOne HTR7B cell line & parental cell line to 5-HT.

ACTOne 5-hydroxytryptamine (serotonin) receptor 7B cells and parental cells (AG-10200-200) were plated overnight in 20 ml culture medium on a BD Biocoat 384 well plate. The next day, cells were dye-loaded with 20 ml/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 5-HT. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of 5-HT in ACTOne 5-hydroxytryptamine (serotonin) receptor 7B cell line. EC50 = 28 nM in the presence of PDE inhibitor Ro20-1724.**
- B. Parental cells do not respond to 5-HT.**