

## DATA SHEET

|                              |   |
|------------------------------|---|
| <b>Catalog #</b>             | AG-10200-242                                      |
| <b>Cell Line Designation</b> | Thyroid Stimulating Hormone Receptor cell line    |
| <b>Parental Cell</b>         | HEK 293-CNG cell (AG-10200-200)                   |
| <b>Gene Introduced</b>       | Human Thyroid Stimulating Hormone Receptor (TSHR) |
| <b>NCBI Accession #</b>      | NP_000360   |

### USAGE

- cAMP assay for Gs-coupled human Thyroid Stimulating Hormone Receptor (TSHR).
- HEK293-CNG cells (AG-10200-200) without transfected Thyroid Stimulating Hormone Receptor are used as a negative control.

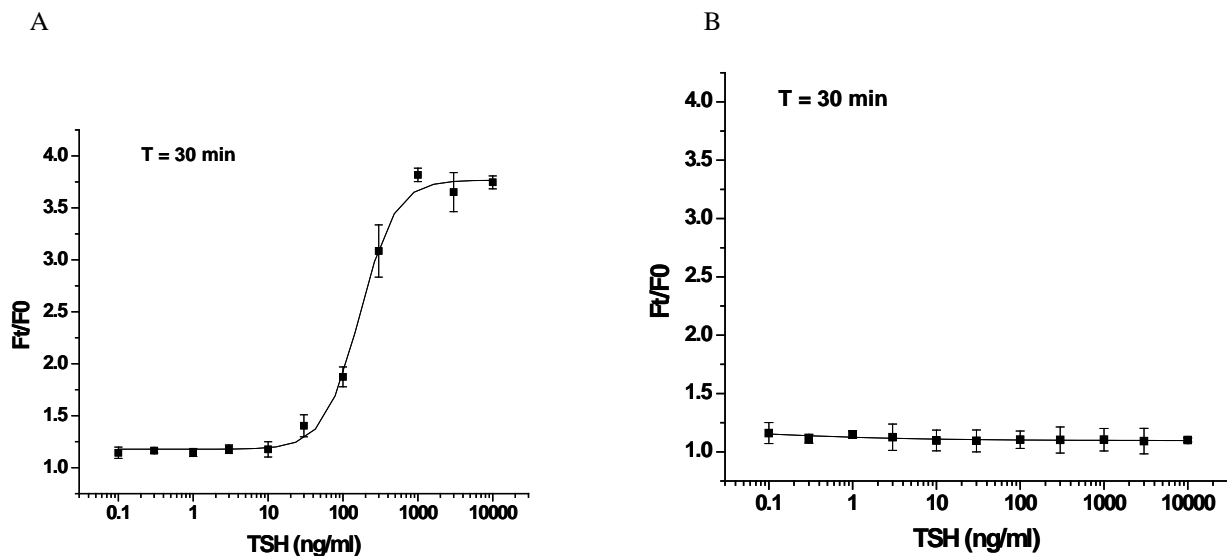
### QUALITY CONTROL

1. This cell line has been tested negative for *Mycoplasma sp.*
2. This cell line has been tested positive for Thyroid Stimulating Hormone 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% complete medium

### DATA EXAMPLE



#### Figure 1. Response of ACTOne TSHR cell line & parental cell line to TSH.

ACTOne TSHR 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 TSH. Ratios of the two readings (F/F0) are plotted in the figure.

- A. Dose response curve of TSH in ACTOne TSHR cell line. EC50 = 167 ng/ml (5.2 nM) in the presence of PDE inhibitor Ro20-1724.
- B. Parental cells do not respond to TSH.