

# DATA SHEET

## CELL LINE DESIGNATION

Thyroid Stimulating Hormone Receptor cell line  
(CB-80200-242b)

## ORIGIN (PARENTAL CELL)

HEK293

## GENE INTRODUCED

Genbank Locus ID 7253

## RECEPTOR INTRODUCED:

Human Thyroid Stimulating Hormone Receptor (NCBI protein  
database AAR07906)

## USAGE

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

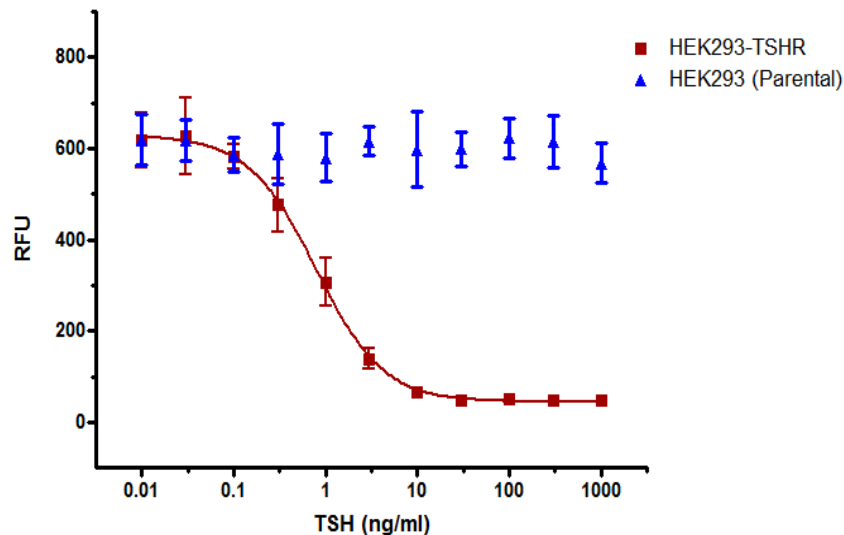
## QUALITY CONTROL

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.

## CELL CULTURE CONDITION

1. Growth medium: 90% DMEM, 10% FBS and 1  $\mu$ g/ml puromycin
2. Freezing medium: 10% DMSO, 90% FBS

## DATA EXAMPLE



**Figure 1. Response of HEK293-TSHR cell line to TSH.**

TSHR cells and parental cells (HEK293) were plated overnight in 80  $\mu$ l culture medium on a 96-well plate black/clear plate. The next day, cells were treated with different concentration of TSH for 20 min. The cells were lysed with 100  $\mu$ l of lysis buffer. 18  $\mu$ l of the cell lysate were transferred into each well of a 384-well assay plate. cAMP concentration was determined with Codex- ACTOne cAMP Fluorimetric ELISA Assay Kit (384-well, CB-80500-523).

- A. Dose response curve of TSH in ACTOne TSHR cell line. EC50 = 0.788 ng/ml (24.5 pM) in the presence of PDE inhibitor Ro20-1724.**
- B. Parental cells do not respond to TSH.**