

## STAT3 LEEPORTER™ Luciferase Reporter-HEK293 Cell Line

**Application :** Functional Assay

### Description

The STAT3 LEEPORTER™ Luciferase Reporter cell line is a stably transfected HEK 293 cell line which expresses Renilla luciferase reporter under the transcriptional control of the STAT3 responsive promoter, so that the cell line is designed to measure the transcriptional activity of STAT3. As a transcription factor, Signal Transducer and Activator of Transcription 3 (STAT3) is activated through phosphorylation at tyrosine 705 in response to various cytokines including IL-6, interferons, epidermal growth factor, hepatocyte growth factor and leukemia inhibitory factor. The phosphorylated STAT3 forms homodimers or heterodimers with STAT1, and the dimers translocate to nucleus in which DNA binding/promoter induction occurs. The STAT3 induction by IL-6 as well as Oncostatin-M is shown in Figures 1 and 3.

### Product Info

**Amount :** 1 Vial

**Content :** Each vial contains  $2 \sim 3 \times 10^6$  cells in 1 ml of 90% FBS + 10% DMSO.

**Storage condition :** Immediately upon receipt, store in liquid nitrogen.

### Application Note

Application: Monitor the STAT3 signaling pathway activity. Screen for activators or inhibitors of the STAT3 signaling pathway. Culture conditions: Cells should be grown at 37°C with 5% CO<sub>2</sub> using DMEM medium (w/ L-Glutamine, 4.5g/L Glucose a

