Control 2 Reporter Cell Lines (HT1080 & Hep G2)

Catalog No.: 32202 (HT1080) & 32232 (Hep G2)

The LightSwitch™ Control 2 Reporter Cell Lines were designed to be used as normalization controls when performing LightSwitch Luciferase Assays using our Pathway Reporter Stable Cell Lines. Each cell line contains a stably integrated LightSwitch ACTB Promoter Control construct (S717678), which is comprised of the promoter sequence of the ACTB (beta actin) gene cloned into the Promoter Reporter Vector, pLightSwitch Prom, upstream of the RenSP luciferase gene.

The Control Reporter Cell Lines are typically used as follows. LightSwitch Luciferase Assays are performed using the chosen Pathway Reporter Stable Cell Line and induction conditions as well as on an uninduced Control Reporter Cell Line of the same cell type (HT1080 or Hep G2). The expression data for the control cell line is averaged across all doses. The experimental data points are then divided by this average value to normalize for non-specific effects.

IMPORTANT: Because all LightSwitch reporter cell lines contain the optimized RenSP luciferase gene, you MUST use our LightSwitch Luciferase Assay Kit (Cat. Nos. 32031 & 32032) to obtain optimal results. (Other luciferase assay reagents are not compatible with RenSP.)

Experimental Details:

1. Assays were performed in triplicate. 10K cells per well were seeded in a 96-well white plate in standard media without antibiotic.
2. Cells were incubated at 37°C for 36 hours.
3. Plates were frozen at -80°C overnight. (This step is optional, but freezing ensures complete lysis of the cells prior to running the LightSwitch Assay.)
4. Plates were thawed to room temperature and LightSwitch Luciferase Assays were performed per the standard protocol.