CELL LINES SNAPSHOT

Cell lines are valuable tools to study biological processes, validate therapeutic targets and assess drug efficacy. BPS has developed a large portfolio of stable cell lines that are useful in a wide range of research applications. Cell lines can be purchased, or made available via a Cell Line Rental Program (for select cell lines). Optimized media and reagents are also available to streamline processes.

All of BPS Bioscience's cells have been validated and are provided with detailed protocols that include instructions for general cell culture and maintenance, as well as example experimental setups to minimize the need for end-user optimization and troubleshooting. Each cell line is tested for viability before shipping.

Promoter-Specific Reporter Cells

- Reporter: eGFP or Luciferase
- Promoter-specific expression of the reporter
- Robust, quantitative and reproducible measure of transcription factor activity
- ONE-Step™ Luciferase Assay System for sensitive quantitation of firefly luciferase activity

Over 70 currently available reporter systems:

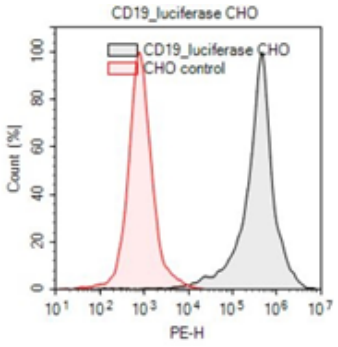
AP1, NF-κB, STAT3, STAT5, ARE, GAL4, Foxp3, ISRE, SRE, CRE/CREB, FOXO, GAS, Gli, Myc, PAI-1, RARα, RARβ, RARγ, TCF/LEF, Notch1/CSL, SBE (TGF/SMAD), TEAD, IL6, IL8, IL2

Overexpression Cell Lines

- Stable cell lines that overexpress a target of interest
- High expression levels

Applications:

- Antibody screening
- Target validation
- Drug discovery
- COVID-19



CAR-T Cell Development and Tools for Immunotherapy

- Target-expressing cells
- Lentivirus-generated anti-BCMA and anti-CD19 T cells
- Immune checkpoint activators and inhibitors
- Dual expression TCR-activator cells

Applications:

- Engineering or validation (specificity, efficacy, potency)
- Evaluation of CAR-T therapeutic potential
- Assay development

CRISPR-Cas9 Gene Editing

- Stable expression of Cas9 for gene editing (Knock-out Knock-in, mutation)
- Cas9 contains a C-terminal FLAG-tag to facilitate detection of the protein in various applications
- Genome editing is simplified because Cas9 delivery is not necessary, resulting in high transfection efficiency of sgRNA and donor DNA
- 10 Cas9-expressing cell lines currently available
- High or low Cas9 expression available for most cell lines
- CRISPRa(SAM) Jurkat cells that stably express nuclease-deficient dCas9 fused to VP64 and a p65/HSF1/MS2 construct, ready to transfect with sgRNA for targeted gene overexpression