Cell Lines Snapshot



Cell lines are valuable tools to study biological processes, validate therapeutic targets, and assess drug efficacy. BPS Bioscience has developed a large portfolio of validated, stable cell lines useful for a wide range of research applications, provided with detailed instructions for general cell culture and with example experimental protocols to minimize the need for end-user optimization and troubleshooting. Our 200+ cell lines, complemented with our culture media and luciferase reagents, provide complete solutions for cell biology research.

Target-Expressing Cells

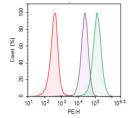
Stable cell lines overexpressing a target of interest display high expression levels, or display variable expression levels to model biological heterogeneity. Expressed proteins include kinases (ROR1, EGFRVIII), ion channels and G-protein coupled receptors (Adenosine A2AR, Nav1.7, Nav1.8, FOLR1), and over 40 immunology targets such as CD19, CD20,

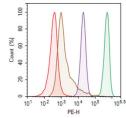
BCMA, TIGIT, LAG3, B7-H3, PSMA, and more.



Useful for:

- Target Validation
- Antibody Screening
- Drug Development
- Binding Studies
- Functional Studies





Flow cytometry data showing control, medium, or high CD20 cell surface expression (left, CD20 CHO Cell Line #79624-M, -H) and showing control, low, medium, or high CD38 expression (right, CD38 CHO Cell Line #79615-L,-M,-H).

Luminescent Cell Line-Derived Xenograft (CDX)

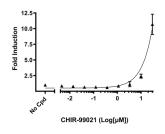


Imaging

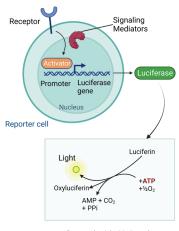
CDX models are used *in vivo* to examine the anti-tumor efficacy of drug candidates across therapeutic modalities. BPS Bioscience has engineered human cell lines to constitutively express firefly luciferase or eGFP for convenient imaging of CDX tumors. Firefly luciferase is an excellent option for quantitative bioluminescence imaging with little background. Well-established, well-characterized human cell lines are available, including Raji, MM.1S, MC38, K562, Jurkat, SKOV-3, and MIA PaCa-2.

Inducible Luciferase Reporter Cell Lines and iPS Cells

- Specific promoter-driven expression of eGFP or luciferase reporter genes.
- Robust measure of transcription factor activity to monitor signaling pathways.
- ONE-Step[™] Luciferase Assay System for sensitive quantification of luciferase activity.
- Over 25+ reporter systems in 30+ cell systems: AP1, NK-κB, STAT3, STAT5, ARE, GAL4, ISRE, SRE, FOXO, GAS, Myc, TCR/LEF, IL-6, IL-2, IL-8, and more.



StemBright™ Reporter iPSCs (induced pluripotent stem cells) express a conditional reporter gene responding to the activation of a transcription factor of interest. For example, the TCF/LEF (Wnt) Luciferase Reporter iPS Cell pool responds to Wnt pathway activators with a quantitative, dose-dependent increase in luciferase activity (left, #78515). These pluripotent reporter cells can also be used to generate differentiated reporter cells.



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Cell Lines Snapshot

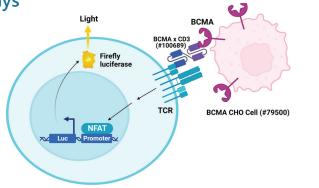
Cell Lines for Immunotherapy and Co-culture Assays

From cells expressing a therapeutic target or an immune checkpoint regulator, to reporter cells for functional studies, BPS Bioscience offers a wide array of immunotherapy-related cell lines.

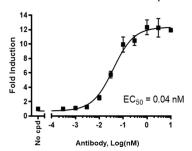
Cell lines include TCR activator cells, TCR knockout, TCR/B2M knockout, CAR-expressing cells, antigen-specific TCR expressing cells, and more.

Applications

- Validation (specificity, efficacy, potency)
- Screening
- CAR evaluation
- Functional studies
- Assay development



NFATLuciferase Reporter Jurkat cell (#60621)

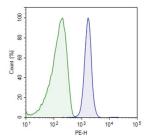


Activation of NFAT-dependent luciferase activity in NFAT Luciferase Reporter Jurkat cells (#60621) incubated with increasing concentrations of bispecific anti-BCMA x anti-CD3 antibody when co-cultured with BCMA-expressing CHO cells (#79500).

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CRISPR/Cas9 for Genetic Engineering and Synergistic Activation Mediator (SAM)

Cas9: Generate knock-in, knock-out, or implement sdRNA screens using Cas9 expressing cells. Available in Jurkat, Raji, Daudi, HEK293, and more.



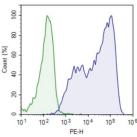
Flow cytometry data showing Cas9 expression in Daudi cells (#78157, in blue) compared to parental cells in green.



Advantages

- Ready for single-guide RNA introduction
- · Generate cell lines or cell pools

SAM: Engineered HEK293, Jurkat, and other cell lines, are ready to overexpress any desired gene. Just transfect with an MS2-aptamer/sgRNA targeting the promoter region of the gene of interest.



Induction of PD-1 expression in CRISPRa (SAM) Jurkat cells (#78080) analyzed by flow cytometry. Cells expressing PD-1 are shown in blue, parental cells in green.

Try before you buy: some cell lines are available via a Cell Line Rental Program as a low-risk option for validating unique cell lines in your laboratory, making sure that the cells are right for your project.

Optimized media and luciferase reagents streamline cell culture and experimental workflow. Our scientists have validated cell culture media and other reagents with each of our cell lines, saving you time and money in optimizing your own media. Also, check out our popular companion product, $ONE-Step^{TM}$ Luciferase Assay System, which generates robust readouts for luciferase reporter cells.

Trust our Quality: we are ISO 9001:2015-certified







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