

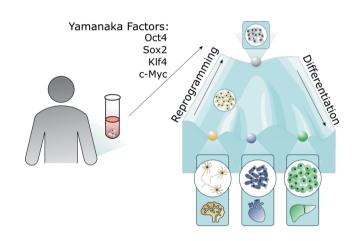


# Genetically engineered iPSCs

## iPSC-Derived Cells Enable Drug Discovery & Cell Therapy Research

- Improved model fidelity over cell lines and biochemical assays
- Improved throughput and cost over animal models
- Applications include disease modelling, personalized medicine, drug screening and toxicity testing

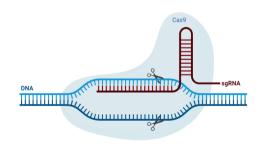
A range of genetically engineered iPSCs providing tailored solutions to meet your specific research needs. iPSCs provide a powerful platform for studying a wide range of cellular processes and diseases. We offer Cas9-expressing iPSCs enabling you to perform precise genetic modifications as well as reporter and knockout iPSCs for studying gene expression of interest.



## Cas9-Expressing iPSCs

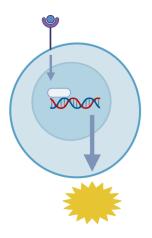
PBMC-derived human iPS cells were engineered to express Cas9 (Streptococcus pyogenes CRISPR associated protein 9) either constitutively or upon doxycyclin induction (tet-on). These cells can be transfected or transduced with a cDNA encoding single-guide RNA(s) targeting specific gene(s) of interest to generate knockout, mutated, or knockin cells. The inducible cells allow temporal control of Cas9 expression, which limits the occurrence of off-target modifications.

Item Name	Product Code
Cas9 Expressing iPS Cell Pool	AMS.78578
Cas9 Inducible (Tet-On) iPS Cell Pool	AMS.78845





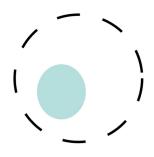




# StemBright™ Reporter iPSCs

StemBright™ Reporter iPSCs are engineered to express a conditional reporter gene that will respond to the activation of a transcription factor within a cell signaling pathway of interest, or to constitutively express luciferase or eGFP for cell tracking. For example, Wnt signaling is involved in the cell cycle re-entry of iPSC-derived cardiomyocytes. The TCF/LEF (Wnt) Luciferase Reporter iPS Cell pool responds to Wnt pathway activators with a quantitative, dose-dependent increase in luciferase activity. These pluripotent reporter cells can also be used to generate differentiated reporter cells.

Item Name	Product Code
StemBright™ Luciferase iPS Cell Pool	AMS.78594
TCF/LEF StemBright™ Luciferase iPS Cell Pool (Wnt Pathway)	AMS.78515



## Knockout iPSCs

Eliminating the expression of a cellular protein can provide valuable research insights. Using CRISPR/Cas9 technology, we can effectively knockout target proteins to change cellular properties as desired. For example, our B2M Knockout iPS Cell Line has the full functional capacity of iPSCs, but has very low immunogenicity, providing a useful tool for allogeneic cell therapy research.

Item Name	Product Code
B2M Knockout iPS Cell Line	AMS.82161



AMS BIOTECHNOLOGY (EUROPE) LTD UK & REST OF THE WORLD

184 Park Drive, Milton Park Abingdon, OX14 4SE **T:** +44 (0) 1235 828 200 **F**: +44 (0) 1235 820 482



#### AMSBIO LLC USA & CANADA

1035 Cambridge Street, Cambridge, MA 02141 **T:** +1 (617) 945-5033 or +1 (800) 987-0985 **F:** +1 (617) 945-8218



#### AMS BIOTECHNOLOGY (EUROPE) LTD SWITZERLAND

Via Lisano 3, (Cp.683) Ch-6900 Messagno <sup>8</sup> **T:** +41 (0) 91 604 55 22 **F**: +41 (0) 91 605 17 85



# AMSBIO EUROPE BV

Berenkoog 41, 1822 BH Alkmaar, Netherlands T: +31 (0) 72 8080244 F: +31 (0) 72 8080142

### Official distributor



