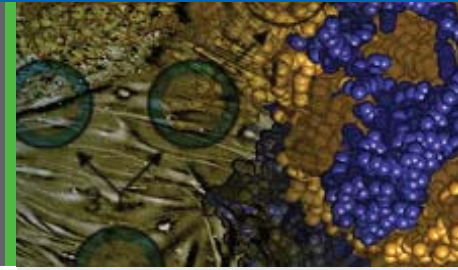


# PSGro<sup>®</sup> hESC/iPSC Medium

Serum-Free, Xeno-Free, Chemically-Defined & Feeder-Independent



## Robust Stem Cell and iPSC Cell Growth Media

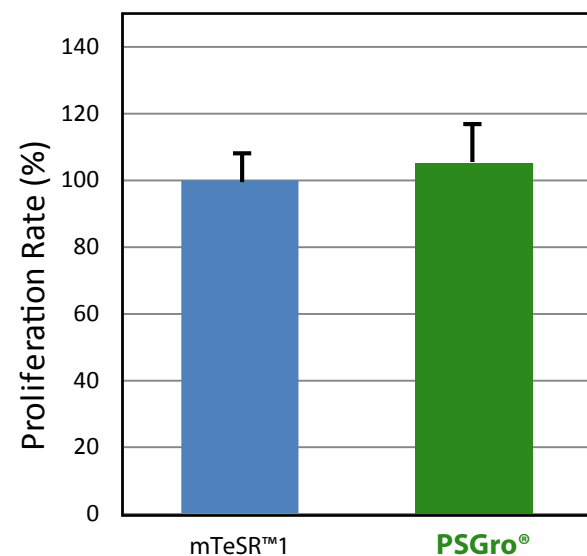
Basic techniques to culture hESCs and generate hiPSCs have been well developed, although limitations remain in many aspects. Currently, many hESC/hiPSC lines have been cultured using mouse or human fibroblast feeders and serum or conditioned medium. These methods are labor intensive, and may prevent clinical applications.

System Biosciences and StemRD together have developed PSGro<sup>®</sup> hESC/iPSC Growth Medium, which is a chemically-defined medium for feeder-independent maintenance of hESCs and hiPSCs. It is a complete, serum-free, defined formulation. PSGro<sup>®</sup> hESC/iPSC Growth Medium has been tested and proven to support the growth and maintenance of pluripotency of both hESC and hiPSC lines when used with BD Matrigel<sup>™</sup> hESCqualified Matrix (BD Catalog #354277) as a substrate.

PSGro<sup>®</sup> hESC/iPSC Growth Medium is chemically defined and is xeno-free, thus eliminating concerns of lot-to-lot variations.

## Highlights

- Chemically defined
- Serum-free
- No feeders or conditioned media needed
- Little or no adaptation from feeder conditions required
- Enables robust expansion of human ESCs or iPSCs
- Comparable to mTeSR<sup>™</sup>1



Human ESCs (H9 line) grown in PSGro<sup>®</sup> medium and mTeSR<sup>™</sup>1 have similar proliferation rates for 10 passages.

## PSGro<sup>®</sup> hESC/iPSC Medium

A fully defined, serum-free and feeder-free, xeno-free medium formulated for the growth and expansion of hESCs and hiPSCs.

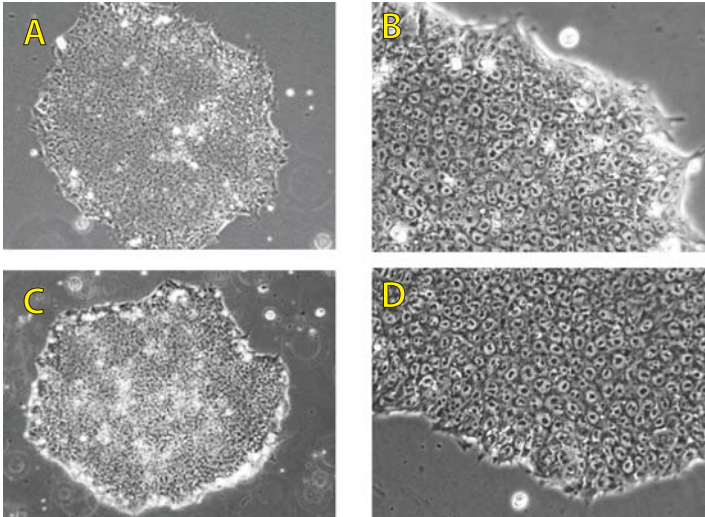
## Ordering information

Product	Quantity	Cat. no.
PSGro <sup>®</sup> hESC/iPSC Growth Medium	1 kit	SC500M-1
PSGro <sup>®</sup> 10X Supplement (50mL, cat. no. SC500M-SP)		
PSGro <sup>®</sup> Basal Medium (450mL, cat. no. SC500M-BM)		

## PSGro® hESC/iPSC Medium Maintains Normal Morphology, Karyotype and Pluripotency

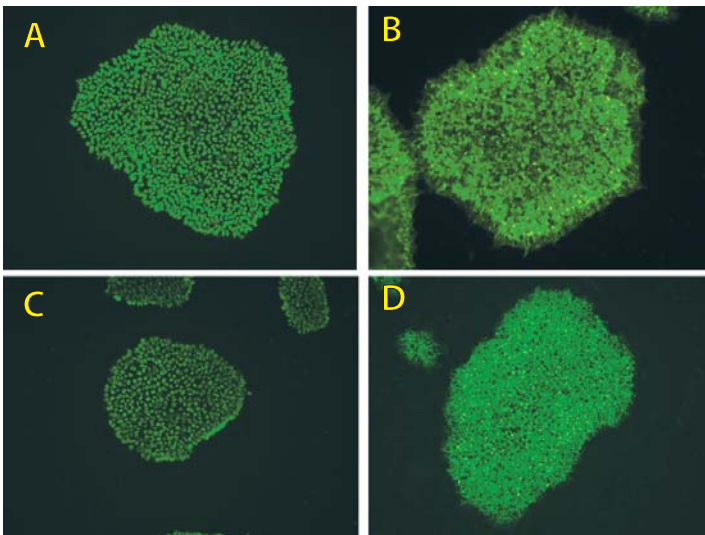
PSGro is a fully defined xeno-free, human embryonic stem (ES) and induced pluripotent stem (iPS) cell culture medium that does not require feeder layers. PSGro enables the proper maintenance and expansion of pluripotent stem cells that sustain the correct morphology and expression of pluripotency markers. The medium supports robust proliferation with retention of a normal karyotype and differentiation potential into multiple lineages across ectoderm, mesoderm and endoderm germ layers.

### Maintain Distinct Stem Cell Morphology



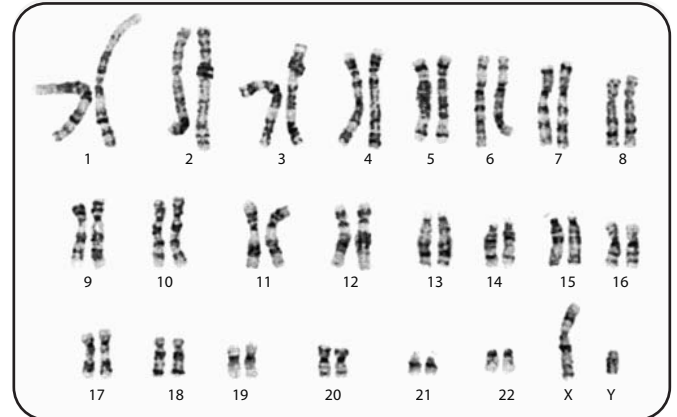
Morphology of hESCs (A,B) & hiPSCs(C,D) Cultured in PSGro® medium.

### Sustain Pluripotency Marker Expression



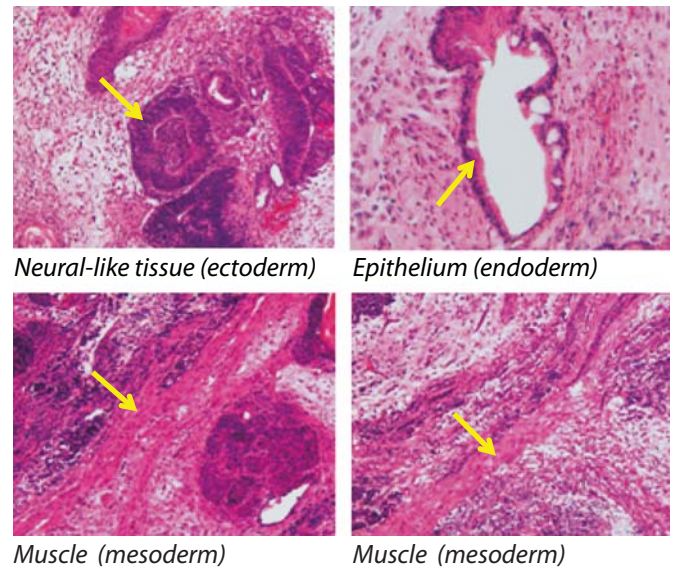
Human iPSCs grown in PSGro® medium express pluripotency markers. Immunofluorescence analysis of hiPSCs shows expression of (A) Oct4, (B) TRA-1-81, (C) Nanog and (D) SSEA-3.

### Retain Normal Chromosomal Karyotype



Chromosomal analysis of hiPSCs cultured in PSGro® medium for 28 passages shows a normal male karyotype 46 XY.

### Differentiation Potential Across Multiple Lineages



Human iPSCs were cultured in PSGro® medium and then injected subcutaneously into SCID mice. Resulting teratomas contained cell types from all 3 germ layers.

## We Also Offer Custom Services - Including Custom iPSC Cell Lines

System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at [www.systembio.com/service](http://www.systembio.com/service) or call us at 888-266-5066.