

Try the  
new brew



# StemMACS™ iPS-Brew XF

Xeno- and feeder-free culture of human ES and iPS cells

StemMACS iPS-Brew XF is a xeno-free media formulation for maintenance and expansion of highly pluripotent stem cells. Expect typical pluripotent colony morphology and surface phenotype, unbiased differentiation potential, and rapid culture initiation after cryopreservation

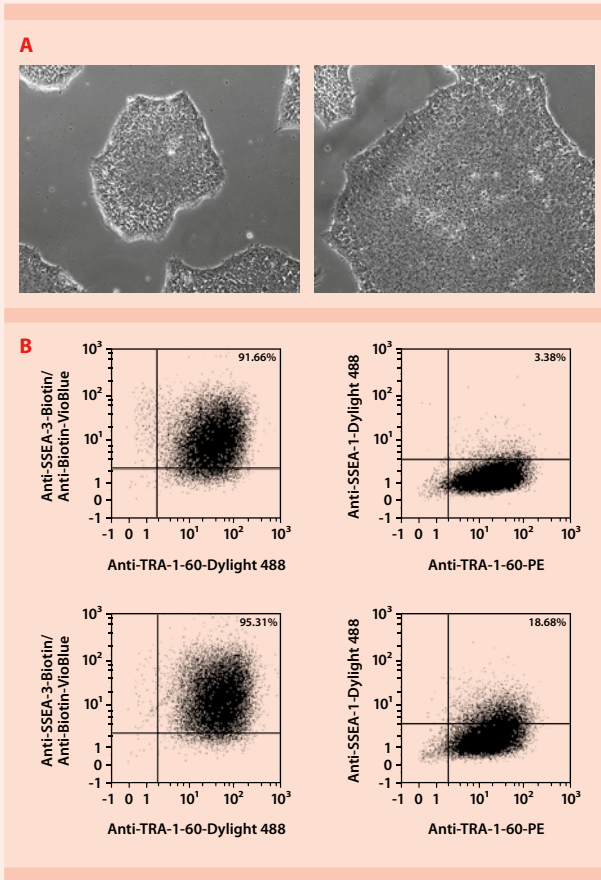
with every use. Make your choice for robust performance and seamless translation today.

- **Xeno- and serum-free**
- **Easy transition to feeder-free conditions**
- **Designed to support future clinical translation**

► [miltenyibiotec.com/ipsbrew](https://miltenyibiotec.com/ipsbrew)

## Highly pluripotent phenotype

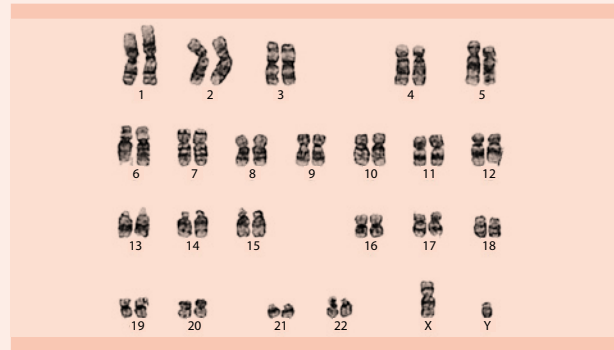
Pluripotent stem cell lines cultured in StemMACS™ iPS-Brew XF have typical pluripotent morphology and surface phenotype.



**Figure 1:** Colony morphology of two independent iPS cell lines during culture on Matrigel® (A). Both cell lines showed low expression of the differentiation marker SSEA-1 and stained high for pluripotency markers (TRA-1-60, SSEA-3) (B).

## Long-term genetic integrity

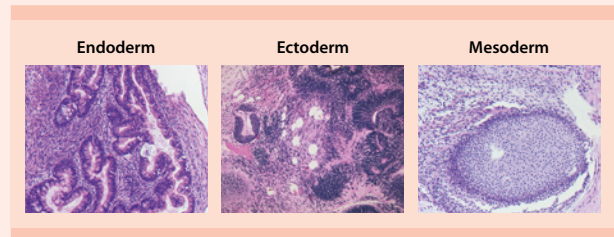
ES and iPS cells cultured in StemMACS iPS-Brew XF maintain a normal karyotype over at least 20 passages during both single cell or cluster passaging.



**Figure 2:** To evaluate the genetic stability of pluripotent stem cell lines cultured in StemMACS iPS-Brew XF, two independent iPS cell lines were propagated for more than 20 passages on Matrigel-coated plates. Both lines maintained normal karyotype. A representative karyogram for line 1 at P20 is shown.

## Full differentiation potential

ES or iPS cells cultured in StemMACS iPS-Brew XF maintain their full pluripotent differentiation potential and consistently give rise to teratomas containing derivatives of all three germ layers.



**Figure 3:** Pluripotent stem cells cultured in StemMACS™ iPS-Brew XF were mixed with Matrigel and injected subcutaneously into NOD-scid-mice. After 8 weeks animals were sacrificed, the teratomas were explanted, sectioned, and stained with hematoxylin/eosin. Representative tissue from all three embryonic germ layers was detected in each teratoma.

Ordering information	Size	Order no.
StemMACS™ iPS-Brew XF	500 mL	130-104-368
StemMACS™ Passaging Solution XF	100 mL	130-104-688
StemMACS™ Y27632	2 mg	130-103-922
StemMACS™ Thiazovivin	1 mg	130-104-461



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