THE NEW STANDARD FOR HUMAN PLURIPOTENT STEM CELL MAINTENANCE

mTeSR™ Plus Stabilized Feeder-Free Medium

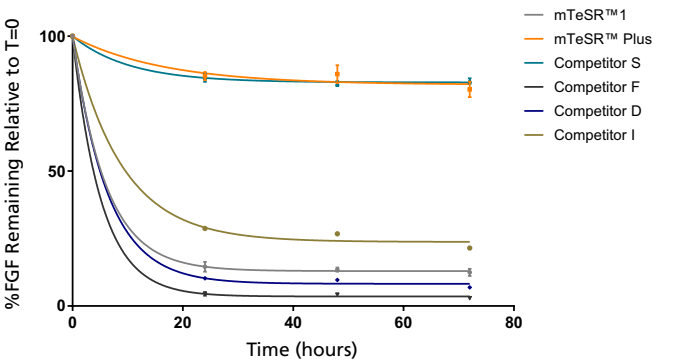

Figure 1. mTeSR™ Plus Maintains Consistent Levels of FGF2 Throughout a Weekend-Free Protocol

FGF2 levels remain high in mTeSR™ Plus when cultured at 37°C over a 72-hour time period. Measured by ELISA.

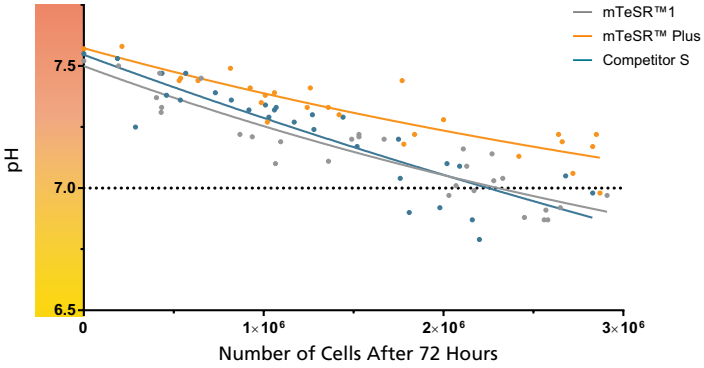

Figure 2. mTeSR™ Plus Maintains Optimal pH Levels Throughout a Weekend-Free Protocol

The pH of spent medium from hPSCs cultured in mTeSR™ Plus is higher than that of hPSCs cultured in mTeSR™1 and other flexible-feeding medium at similar cell densities. pH and cell numbers were measured after a 72-hour period without feeding. Range of cell numbers shown represent different densities that would be observed throughout a typical passage. This demonstrates that feeds can be skipped for two days at any time during routine maintenance using mTeSR™ Plus while maintaining a pH above 7.0. Note: Cultures were fed double the standard medium volume prior to the 72-hour period without feeds in all media and cell numbers are from one well of a 6-well plate.

Maintain hPSCs On Your Own Schedule

- ☑ **Skip 2 days = Double Feed**
- ☑ **Skip 1 day = Regular Feed**

The possibilities are endless. Use your regular schedule, or try something new to free up your days.

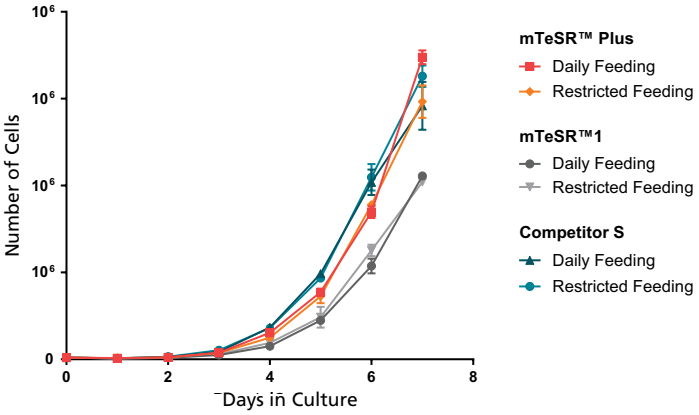

Figure 3. mTeSR™ Plus Supports Higher Cell Numbers

Growth curves were obtained for human ES (H9) cells cultured in mTeSR™1 and mTeSR™ Plus or other flexible-feeding medium on Corning® Matrigel® matrix over 7 days with either daily feeds or restricted feeds. Growth curves were determined by seeding 20,000 cells per well of a 6-well plate as aggregates and counting the cell numbers each day in duplicate wells.

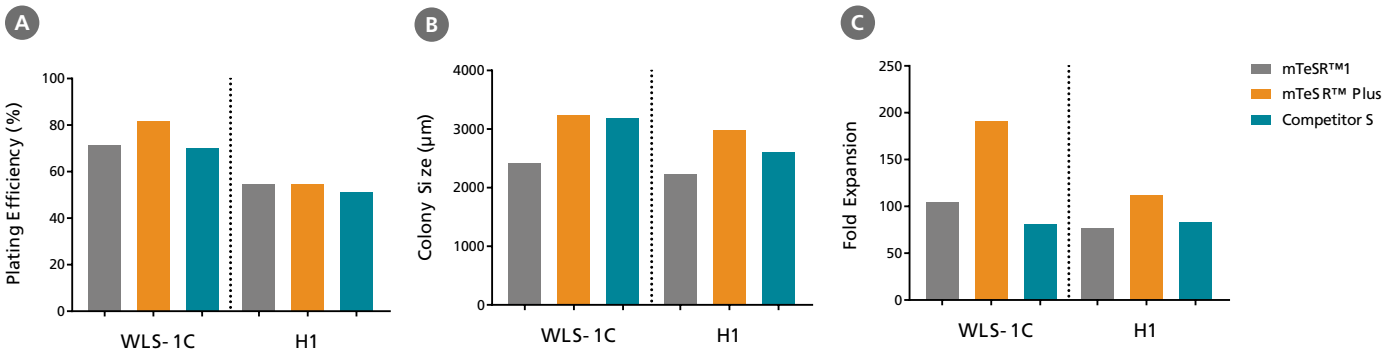

Figure 4. Evaluation of mTeSR™ Plus Cell Growth Parameters

Graph shows (A) average plating efficiency, (B) average colony size, and (C) average fold expansion per passage of replicate wells ± SEM obtained for human ES (H1) and iPS (WLS-1C) cells cultured in mTeSR™1 (daily feeds), mTeSR™ Plus (restricted feeds), or another flexible-feeding medium (restricted feeds) on Corning® Matrigel® over 8-9 passages. Size was determined by measuring representative colony diameters at harvest. Note that this data is representative of cultures passaged at a 7-day passaging interval.
Plating efficiency = number of colonies at harvest divided by the number of aggregates seeded
Fold expansion = number of aggregates harvested divided by number of aggregates seeded

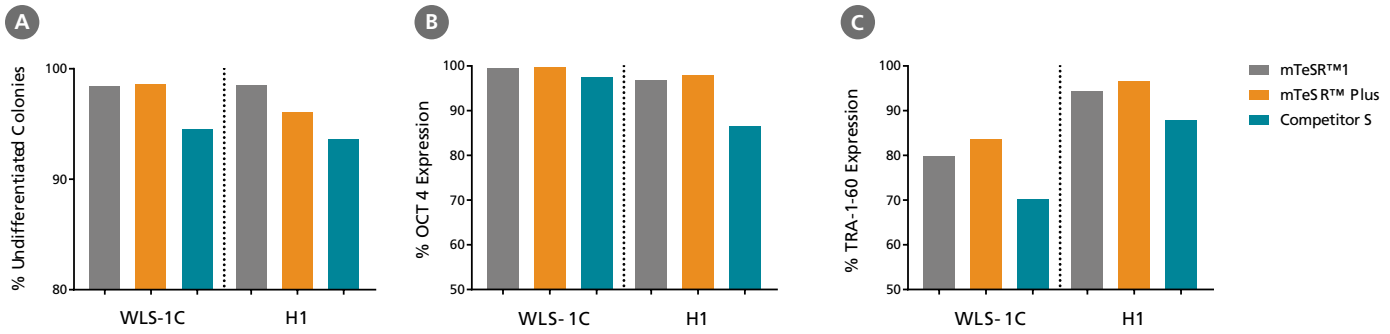

Figure 5. Evaluation of mTeSR™ Plus Cell Quality Parameters

Graph shows (A) percentage of undifferentiated colonies and percentage marker expression of (B) OCT4(OCT3) and (C) TRA-1-160 per passage of replicate wells ± SEM obtained for human ES (H1) and iPS (WLS-1C) cells cultured in mTeSR™1 (daily feeds), mTeSR™ Plus (restricted feeds), or another flexible-feeding medium (restricted feeds) on Corning® Matrigel® over 8-9 passages. hPSCs were characterized using flow cytometry at passage 5. This data is representative of cultures passaged at a 7-day passaging interval.

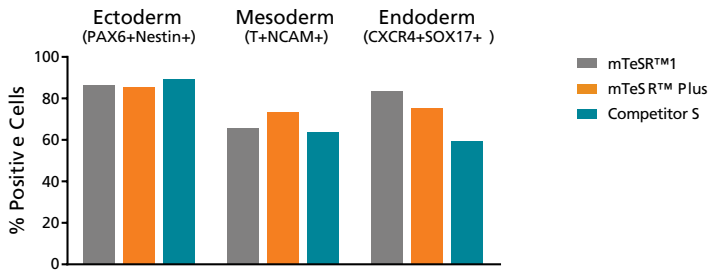

Figure 6. Cells Maintained in mTeSR™ Plus have Comparable Differentiation Efficiencies to Cells Maintained in mTeSR™1

Human ES and iPS cells were maintained in mTeSR™1 (daily feeds), mTeSR™ Plus (restricted feeds), or another flexible-feeding medium (restricted feeds). Cells were differentiated using directed differentiation protocols and subjected to flow cytometry analysis. The markers used for flow cytometry for each germ layer are listed in the title.

Product Information

PRODUCT	SIZE	CATALOG #
mTeSR™ Plus	500 mL Kit	05825