Xyltech™ Cell Proliferation Control System

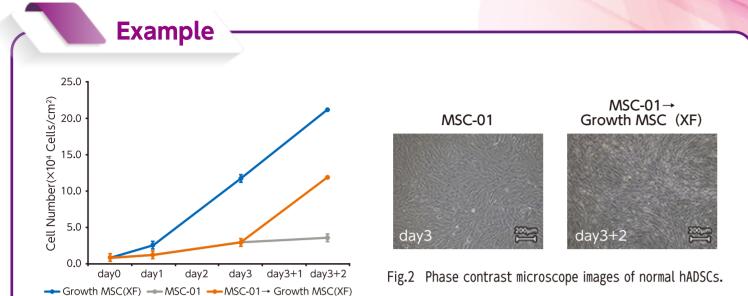


Fig.1 Changes in the number of normal hADSCs.

hADSCs were cultured using Growth MSC+Supplement XF [for proliferation] (Growth MSC(XF)) and MSC-01 Xeno-Free [for proliferation control] (MSC-01). When the medium was replaced on day 3, it was confirmed that cells quickly repopulated upon switching from MSC-01 to Growth MSC (XF).



- Xyltech™ Growth MSC (with Supplement XF or Supplement AF) enables the culture of human adipose-derived mesenchymal stem cells without the need for a coating agent.
- Xyltech™ MSC-01 Xeno-Free and Xyltech™ MSC-02 Animal-Free can be cultured maintaining cell properties while suppressing proliferation.
- Xyltech™ MSC series proposes various culture applications.

Cell proliferation control
Reducing the number of passages
and managing experimental
schedules

Cell freezing avoidance
Short-term cell storage and avoidance of cultivation tasks during holidays

Non-freezing transport of cells

Cell density control during
live cell transport

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Serum-Free hMSC(human mesenchymal stem cell) Proliferation Control Medium

Xyltech™ MSC-01 Xeno-Free Xyltech™ MSC-02 Animal-Free

Serum-Free hMSC Growth Medium

Xyltech™ Growth MSC

Products

Cat. No.	Product Name	Features / Applications	Volume
10401	Xyltech™ MSC-01 Xeno-Free	Serum-free culture medium for human Mesenchymal Stem Cells [Cell proliferation suppression] (Xeno-Free)	100ml(P)
10402	Xyltech™ MSC-02 Animal-Free	Serum-free culture medium for human Mesenchymal Stem Cells [Cell proliferation suppression] (Animal-Free)	100ml(P)
10411	Xyltech™ Growth MSC Medium	Serum-free culture medium for human Mesenchymal Stem Cells [Cell proliferation] Basal culture medium for MSCs	500ml(P)
10412	Xyltech™ Growth MSC Supplement XF	Serum-free culture medium for human Mesenchymal Stem Cells [Cell proliferation] Supplement (Xeno-Free)	10ml(P)
10413	Xyltech™ Growth MSC Supplement AF	Serum-free culture medium for human Mesenchymal Stem Cells [Cell proliferation] Supplement (Animal-Free)	10ml(P)

(P)PET bottle

These products are research reagents and not intended for human or animal treatment or diagnostic purposes.

Serum-Free hMSC(human mesenchymal stem cell) Proliferation Control Medium

Serum-Free hMSC Growth Medium



MSC-01 or MSC-02

[for growth suppression]

Using MSC-01 Xeno-Free

Using MSC-02 Animal-Free

Phase contrast microscope images of normal human

adipose-derived MSCs (hADSCs) after 3 days of culture with

Cell Morphology

Growth MSC (for growth)

Using MSC Supplement XF

Using MSC Supplement AF

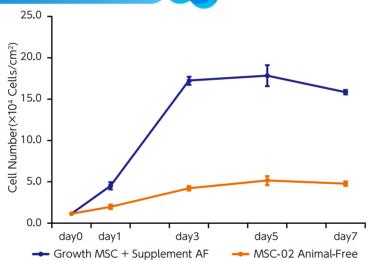
Growth MSC (for growth) and, MSC-01 or

Xyltech™ series

Xyltech™ MSC-01 Xeno-Free Xyltech™ MSC-02 Animal-Free

- Human MSCs culture medium for suppressing cell proliferation rate while maintaining the cell properties for up to 3 days
- Rapid recovery of cell proliferation after switching to the growth medium
- Xyltech™ MSC-01 Xeno-Free contains only human-derived components, no animal derivatives. Xyltech™ MSC-02 Animal-Free contains no ingredients derived from animals, including humans.
- These products do not contain glucose

Cell Proliferation Profiling 25.0 (×10⁴ 0.0 ق 5.0 0.0



The cell number of normal hADSCs cultured using Growth MSC (for cell proliferation, blue) and MSC-02 Animal-Free (for cell proliferation suppression, orange) was determined.

Oil Red O stain Alizarin Red S stain Alcian Blue stain MSC-02 (for growth suppression). **Cell Differentiation**

Differentiation induction of normal hADSCs into adipocytes (left), osteoblasts (middle), and chondrocytes (right). Prior to the differentiation induction, hADSCs were cultured with MSC-01 or MSC-02 (for growth suppression) for 3 days.

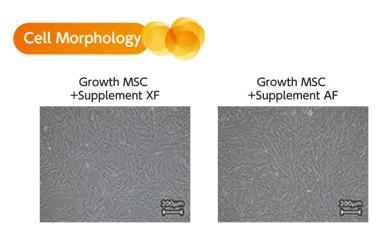
We recommend using products Xyltech™ and Xyltech™ Growth as a combination.

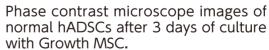


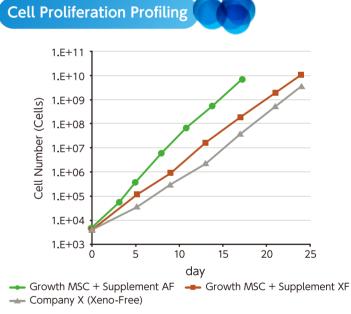


Xyltech™ Growth MSC Medium Xyltech™ Growth MSC Supplement XF Xyltech™ Growth MSC Supplement AF

- Human MSCs culture medium for cell proliferation while maintaining the cell properties
- Xyltech™ Growth MSC Medium used as the basal culture medium, supplemented with Xyltech™ Growth MSC Supplement XF or Xyltech™ Growth MSC Supplement AF
- Xyltech™ Growth MSC Supplement XF is xeno-free, Xyltech™ Growth MSC Supplement AF is animal-free
- No coating required on culture vessels

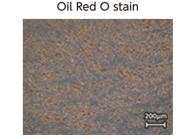


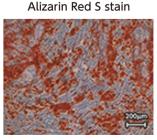


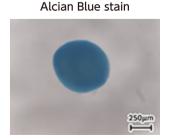


The cell number of normal hADSCs cultured up to the 6th passage using Growth MSC and Company X xeno-free medium was determined.









Differentiation induction of normal hADSCs into adipocytes (left), osteoblasts (middle), and chondrocytes (right). Prior to the differentiation induction, hADSCs were cultured with Growth MSC+Supplement AF medium for 3 days.