Cell & Gene Therapy
Regenerative Medicine

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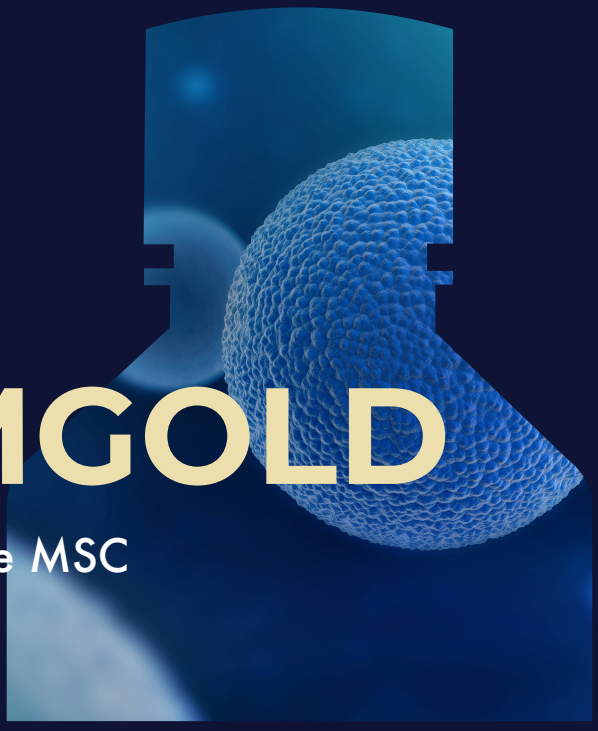
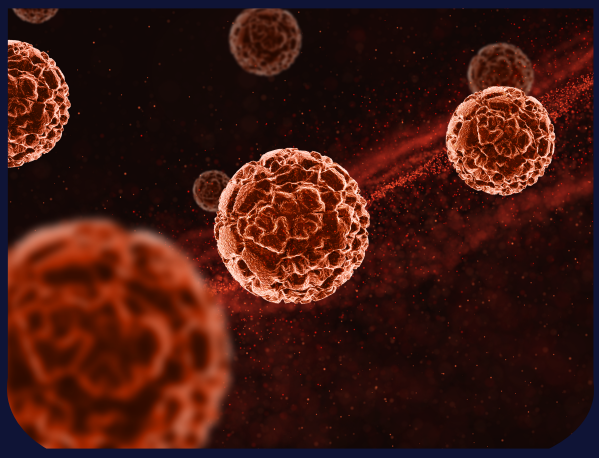
Discovering Solutions



STEMGOLD

High-Performance MSC Growth Medium



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Media that changes life.

Atlantis Bioscience Pte Ltd

Atlantis Bioscience is a Singapore-based life science solutions company that is committed to improving the lives of people, researchers, and scientists worldwide. We specialize in sourcing and supplying translational solutions in cell and gene therapy, aging and neuroscience, drug discovery and development, personal care science, and food science.

Our team of experts is passionate about providing our customers with the most innovative and cutting-edge solutions to help them advance their research and make a real difference in the world. We believe that life science research is essential to addressing some of the most pressing challenges facing humanity today, such as aging, disease, and climate change. That's why we are committed to supporting researchers with the tools and resources they need to succeed.

‘Providing the finest bench-to-bed support that makes a difference.’

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STEMGOLD

Serum- free, Xeno-free defined medium for hMSC

Our high-performance MSC Growth Medium is optimised for **consistent and superior growth of hMSCs**. It enables the maintenance of bone marrow-derived MSC (BM-hMSC), umbilical cord-derived MSC (UC-hMSC), and adipose-derived MSC (AD-hMSC), with excellent trilineage differentiation potential.

This media is available for R&D and for GMP manufacturing.

**Image may differ from actual product*

STEMGOLD Highlights

- Superior and high-performance hMSCs expansion for multiple passages
- Maintains trilineage differentiation potential
- Retains ISCT criteria
- GMP compliant manufactured formulations to minimise lot-to-lot variation and improves experimental reproducibility
- Pre-coating is not necessary for the expansion of hMSCs

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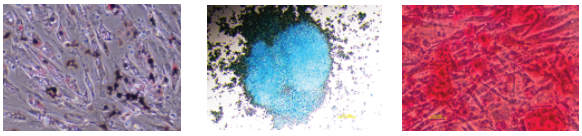
MSC ISCT Marker Expression

	Positive Marker			Negative Marker				
	CD73	CD90	CD105	CD14	CD19	CD34	CD45	HLA-DR
UC-hMSC (P9)	95	99	99	0	0.11	0	0	0
AD-hMSC (P10)	96	98	99	0.02	0.02	0.11	0.02	0.01

Table.1 UC-hMSCs and AD-hMSCs expanded in STEMGOLD High Performance MSC Growth Medium exhibit characteristic MSC surface marker expression.

Differentiation Potential



Adipocytes Chondrocytes Osteoblasts

Fig. 1 AD-hMSCs expanded in STEMGOLD High Performance MSC Growth Medium from passage 3 displayed a retained trilineage differentiation potential as shown through Oil red O staining (adipocyte), Alcian blue staining (chondrocyte), and alkaline phosphatase staining (osteoblast).

Superior Proliferation Rate

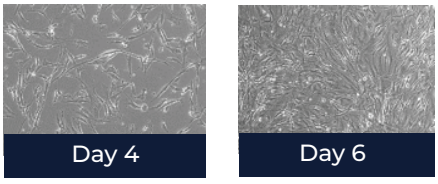


Fig.2 Phase-contrast image of AD-hMSCs cultured in STEMGOLD High Performance MSC Growth Medium on Day 4 and Day 6.

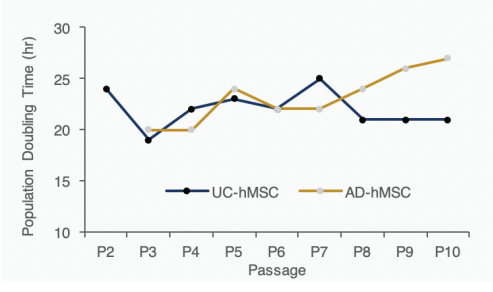


Fig. 3 STEMGOLD High Performance MSC Growth Medium maintains a stable growth rate of less than 30h/doubling over the course of 10 passages.

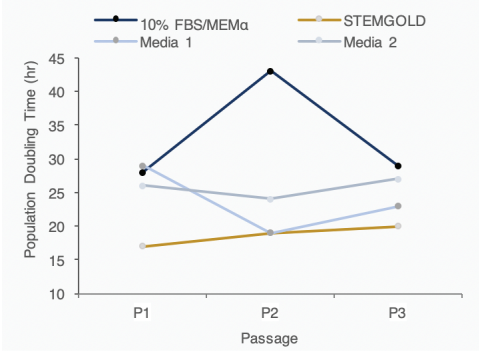


Fig. 4 STEMGOLD High Performance MSC Growth Medium exhibits a shorter doubling time compared to standard 10%FBS/MEMα and two competing serum-free products in the market.

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+65 8608 0974

sales@atlantisbioscience.com

www.atlantisbioscience.com.sg

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