

Human Mesenchymal Stem Cells

Upgrade Your Path to Better Results



Improved Characterization for Better Performance

Lonza's Human Bone Marrow-Derived Mesenchymal Stem Cells (hMSCs) have expanded cell characterizations to meet industry guidelines for translational and cell therapy research applications. Multiple donors are available including different donor ethnicity and ages. Use with Lonza medium (MSCGM™ Media BulletKit™ or TheraPEAK™ MSCGM™ CD Media BulletKit™) for superior performance.

Lonza's hMSCs are cryopreserved at passage 2 and express CD73*, CD90*, CD29, CD105, CD166 and CD44, but not CD14, CD19*, CD34, CD45 and HLA-DR*. They are also tested for tri-lineage differentiation to the osteogenic (bone), chondrogenic (cartilage) and adipogenic (fat) lineages.

*Designates the improved testing performed on these cell types

Features and Benefits:

- **Quality** – Conforms to the International Society of Cellular Therapy (ISCT) standards for marker expression and tri-lineage differentiation
- **Reliability** – Fully tested to perform through passage 5 when using applicable protocol and medium
- **Ease of Use** – Just thaw cells and culture with recommended medium and protocol
- **Convenience** – Ready to use, cryopreserved cells offer flexibility with experimental schedules

Contact your local sales representative for further information or visit: www.lonza.com/hmsc

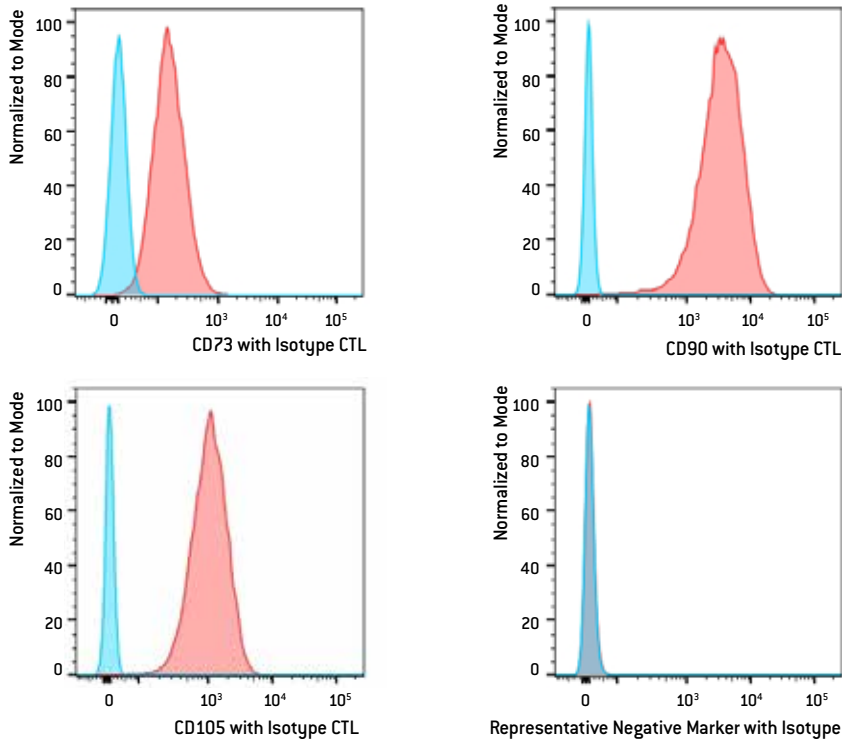


Figure 1: Representative positive and negative flow cytometric analysis of Lonza's hMSCs. Lonza's hMSCs are positive for surface markers CD73, CD90, CD105, CD166, CD44 and CD29, and negative for surface markers CD14, CD19, CD34, CD45 and HLA-DR.

Ordering Information

Cat. No.	Product	Description	Size
Cells			
PT-2501	hMSC – Human Mesenchymal Stem Cells		≥750,000 cells/vial
Media			
PT-3001	MSCGM™ Mesenchymal Stem Cell Growth Medium BulletKit™	MSCBM Basal Medium (440 mL) + MSCGM™ SingleQuots™	Kit
190632	TheraPEAK™ MSCGM™ CD Serum-free Mesenchymal Stem Cell Growth Medium BulletKit™	MSCBM™ CD Basal Medium (500 mL) + MSCGM™ CD SingleQuots™	Kit
Differentiation			
PT-3002	hMSC – Human Mesenchymal Stem Cell Osteogenic Differentiation Medium BulletKit™	Osteogenic Differentiation Basal Medium (170 mL) + SingleQuots™ Kit	Kit
PT-3003	hMSC – Human Mesenchymal Stem Cell Chondrogenic Differentiation Medium BulletKit™	Chondrogenic Differentiation basal medium (185 mL) + SingleQuots™ Kit	Kit
PT-3004	hMSC – Human Mesenchymal Stem Cell Adipogenic Differentiation Medium BulletKit™	Adipogenic Maintenance Medium (170 mL) + SingleQuots™ Kit, Adipogenic Induction Medium (170 mL) + SingleQuots™ Kit	Kit

Contact Information

North America

Customer Service: +1 800 638 8174 (toll free)
 order.us@lonza.com
 Scientific Support: +1 800 521 0390 (toll free)
 scientific.support@lonza.com

Europe

Customer Service: +32 87 321 611
 order.europe@lonza.com
 Scientific Support: +32 87 321 611
 scientific.support.eu@lonza.com

International

Contact your local Lonza distributor
 Customer Service: +1 301 898 7025
 Fax: +1 301 845 8291
 scientific.support@lonza.com

International Offices

Australia	+ 61 3 9550 0883
Belgium	+ 32 87 321 611
Brazil	+ 55 11 2069 8800
France	0800 91 19 81 (toll free)
Germany	0800 182 52 87 (toll free)
India	+91 22 4342 4000
Japan	+ 81 3 6264 0660
Luxemburg	+32 87 321 611
Singapore	+ 65 6521 4379
The Netherlands	0800 022 4525 (toll free)
United Kingdom	0808 234 97 88 (toll free)

Lonza Cologne GmbH – 50829 Cologne Germany

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