

PRODUCT DESCRIPTION

MesenCult®-XF Medium (Catalog #05420) is a standardized, xeno-free, serum-free medium for the culture of human mesenchymal stem cells (MSCs). MesenCult®-XF Medium is optimized for the expansion of bone marrow-derived human mesenchymal stem cells *in vitro* as well as their enumeration using the colony-forming unit - fibroblast (CFU-F) assay. MesenCult®-XF supports long-term growth of MSCs and cells maintain multi-lineage differentiation potential.

MesenCult®-XF Medium must be used in conjunction with the MesenCult®-XF Attachment Substrate (Catalog #05424) and the MesenCult®-ACF Dissociation Kit (Catalog #05426). Components of MesenCult®-XF Attachment Substrate and MesenCult®-ACF Dissociation Kit are tested for optimal cell adherence when cells are cultured with MesenCult®-XF Medium. MesenCult®-XF Medium must also be supplemented with L-Glutamine.

COMPONENTS

05421 MesenCult®-XF Basal Medium	400 mL
05422 MesenCult®-XF Supplement (5X)	100 mL

Although MesenCult®-XF Supplement (Catalog #05422) contains relatively low concentrations of human apo-transferrin, this product should be treated as a biohazard and handled accordingly.

STABILITY AND STORAGE

05421 MesenCult®-XF Basal Medium	400 mL
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Product stable at 2 - 8°C for one year from date of manufacture as indicated on the label.

05422 MesenCult®-XF Supplement (5X)	100 mL
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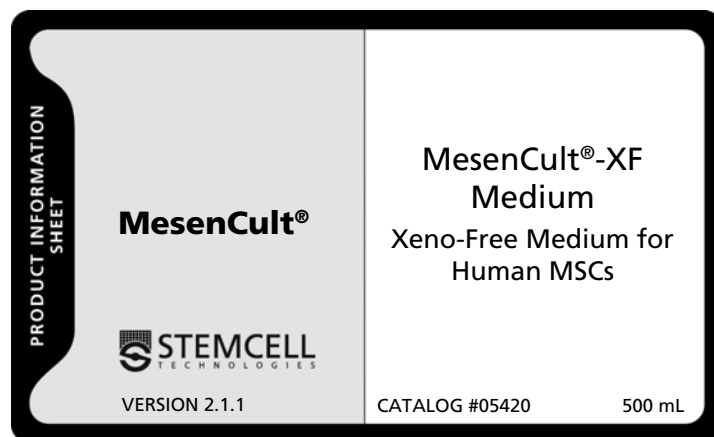
Product stable at -20°C for one year from date of manufacture as indicated on the label. Storage at 2 - 8°C is not recommended.

Storage of 10 mL aliquots at -20°C is possible; do not freeze-thaw more than twice.

This product has been aseptically manufactured using tightly controlled processes and is sterility tested.

RELATED PRODUCTS

PRODUCT	CATALOG #
MesenCult®-XF Culture Kit	05429
MesenCult®-XF Attachment Substrate	05424
MesenCult®-ACF Dissociation Kit	05426
L-Glutamine	07100



DIRECTIONS FOR USE

Preparation of Medium

1. Thaw MesenCult®-XF Supplement (5X; Catalog #05422) overnight at 2 - 8°C.

If desired, MesenCult®-XF Supplement can be aseptically dispensed into working aliquots and stored frozen at -20°C. Repeated thawing and freezing is not recommended.

2. Add the entire MesenCult®-XF Supplement (100 mL) to one bottle (400 mL) of MesenCult®-XF Basal Medium for a total volume of 500 mL.

*Complete MesenCult®-XF Medium should be prepared in volumes that can be **used within 5 days**. Prepare an amount suitable for your needs by diluting MesenCult®-XF Supplement 1/5 (final dilution) in MesenCult®-XF Basal Medium (e.g. 20 mL MesenCult®-XF Supplement + 80 mL MesenCult®-XF Basal Medium).*

3. Add L-Glutamine (Catalog #07100) to a final concentration of 2 mM. Mix well. Complete MesenCult®-XF Medium is stable when stored at 2 - 8°C for up to 5 days.
4. For more information on culturing human mesenchymal stem cells with MesenCult®-XF Medium, refer to the technical manual for *Enumeration and Expansion of Human Mesenchymal Stem Cells Using MesenCult®-XF Medium* (Manual Catalog #29184) available at www.stemcell.com