

MusclePlus¹³³

RECOMMENDED FOR

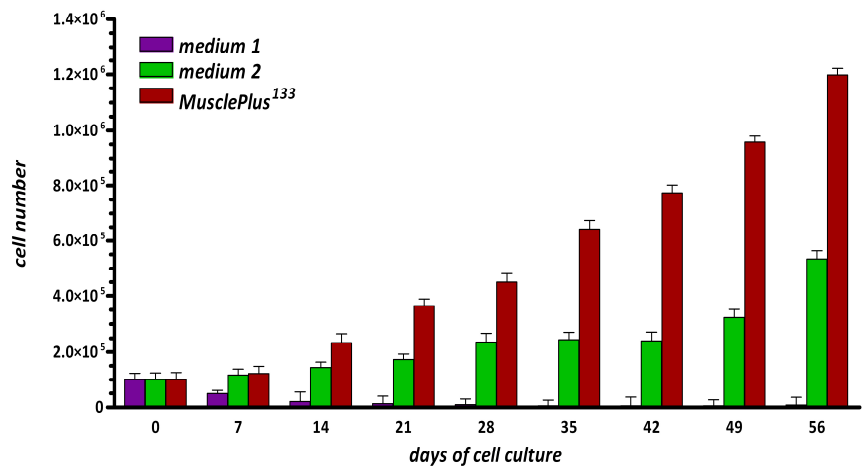
- Human muscle-derived CD133+ progenitor cells
- Satellite cells

PRODUCT DESCRIPTION

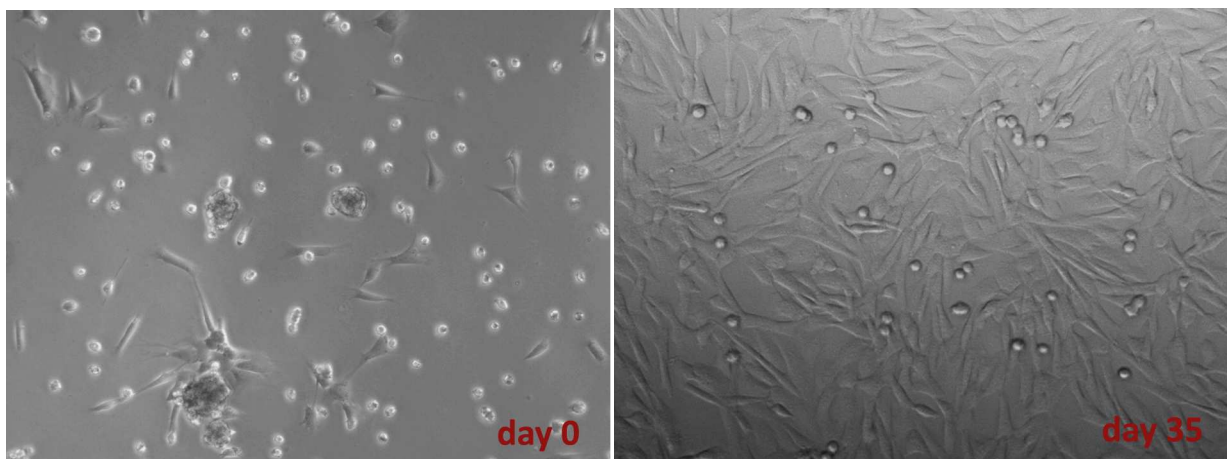
MusclePlus¹³³ is a ready-to-use medium specifically designed to support the expansion of **human muscle-derived CD133+ progenitor cells** (~20 fold) and to maintain their pluripotency without inducing early senescence and differentiation during in vitro expansion.

Its use in experimental research guarantees the maintenance of an homogeneous cell population even after numerous passages, allowing reproducible results.

For optimal performance, the medium must be supported with additional **cytokines mix**, a mixture of growth factors able to induce a vigorous expansion of CD133+ cells while maintaining their primitive phenotype. Differentiation is largely inhibited. The medium for stem cells do not contain antibiotics.



Proliferation trend of muscle-derived CD133+ progenitor cells: comparison of Muscle-derived stem cells proliferation behavior after exposition to different commercial media and **MusclePlus¹³³**.



Morphology of human peripheral blood-derived CD133+ cells after ex vivo proliferation in **HemoPlus¹³³** medium

STORAGE AND STABILITY

Basal medium

After arrival, immediately store **MusclePlus¹³³** basal medium at 4-8°C and cytokine mix rates at -20°C. If properly stored, the product is stable for 6 months. Once complemented, store at 4-8°C and use within one week.

Cytokines mix rates

Once arrived, store the complete frozen medium rates at -20°C. Aliquots are stable for 6 months, if correctly stored.

PRODUCT	STORAGE TEMPERATURE	STABILITY
MusclePlus ¹³³ basal medium	4-8°C	6 months
Cytokine mix rates	-20°C	6 months
Complete frozen medium	-20°C	6 months
Reconstituted medium	4-8°C	1 week

NOTES: These products are light sensitive: protect from light once completed.

Do not subject to repeated freeze/thaw cycles.

INSTRUCTIONS FOR PREPARATION

To complement **MusclePlus¹³³**:

1. Thaw an aliquot of basal medium corresponding to the volume needed (10ml of basal medium for each cytokine mix rate).
2. Defrost the corresponding rate of cytokine mix at room temperature (15-25°C).
3. Disinfect tubes and work in sterile conditions in a laminar flow hood.
4. Suspend gently the cytokine mix before supplementing the medium.
5. Add the cytokine mix rate(s) to the basal medium.
6. Mix the solution and filter (0,22µm) the complete medium obtained.
7. If required, thaw the medium at 37°C in a water bath before use.
8. Protect **MusclePlus¹³³** from light and use within a week.
9. If needed, add antibiotics to the medium (not necessary).

COMPONENT	TOTAL VOLUME (cmY_Mp100)	TOTAL VOLUME (cmY_Mp500)	VOLUME for 10 ml of COMPLETE MEDIUM
MusclePlus ¹³³ basal medium	100ml	500ml	10ml
Cytokine mix rates	0,76ml (10 rates)	3,8ml (50 rates)	76µl

To use complete frozen medium:

1. Defrost the medium rate(s) needed at room temperature (15-25°C).
2. If required, thaw them at 37°C in a water bath.
3. Disinfect the tubes and work in sterile conditions in a laminar flow hood.
4. Mix gently the complete **MusclePlus¹³³** medium to suspend all the components.
5. Add the complete **MusclePlus¹³³** medium to the cells.
6. Filtering is not necessary before use.
7. Store the medium at 4-8°C, protect from light, and use it within a week.

PRECAUTIONS

Aseptic addition of cytokine mix rate to the basal medium is required prior to use.

INTENDED USE

For in vitro laboratory use or further manufacturing only. For research only, not for human use.

ORDERING INFORMATION

Cat.No.	Product Description	Size
cmY_Mp100	MusclePlus¹³³ basal medium and cytokines mix rates	100ml
cmY_Mp500	MusclePlus¹³³ basal medium and cytokines mix rates	500ml
cmY_Mp-frozen	MusclePlus¹³³ complete frozen medium - rates	custom

