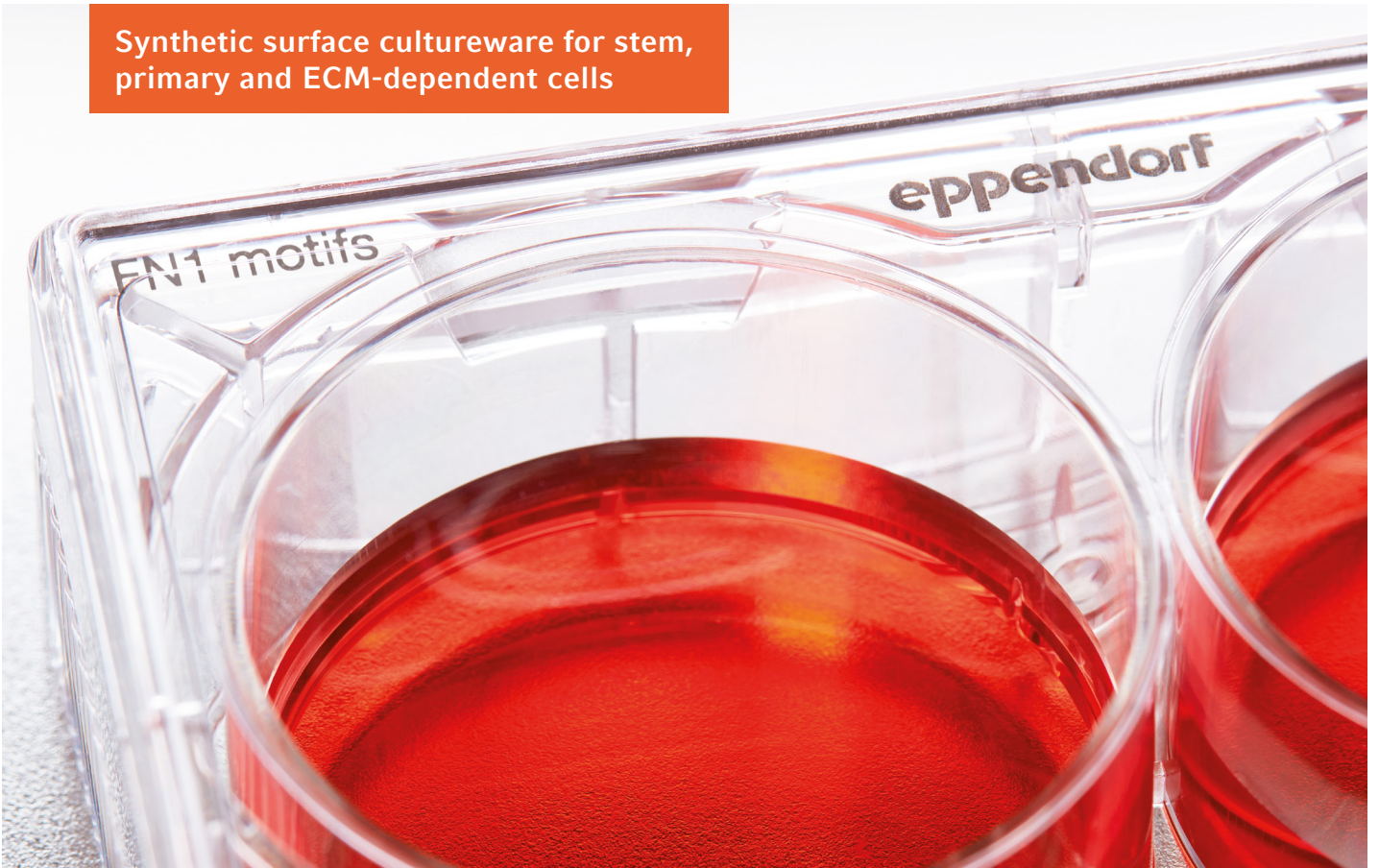


Synthetic surface cultureware for stem,
primary and ECM-dependent cells



Seed. Proceed. Reproduce.

Ready-to-use CCCadvanced® FN1 motifs cultureware

Natural Performance.

Synthetic and ready-to-use cultureware for stem, primary and ECM-dependent cells

Main advantages vs. self-coating

- > No tedious preparation with possible vessel/coating media dissipation: ready-to-use
- > Fully defined surface supports predictable expansion and differentiation: synthetic RGD-derived motifs with optimized steric configuration
- > No expensive lot-specific performance verification of coating media: lot-to-lot production consistency
- > Reduced contamination risk: no preparation needed and individually packed

Main applications

Expansion and differentiation of:

- > Stem cells (e.g., hiPSCs, hMSCs)
 - > Primary cells
 - > Other ECM-sensitive eukaryotic cells
-
- > Feeder-free cell culture
 - > Restrictive culture conditions (serum-and xeno-free)

Other advantages

- > High experimental flexibility: suitable for many cell types, culture media and detachment media
- > Easy logistics: shelf-life of 36 months at room temperature
- > Quality Management System (QMS): compliant to the standard QMS requirements (e.g. ISO 13485)

Optimized to protect your precious cells and experiments: plates, flasks, and dishes

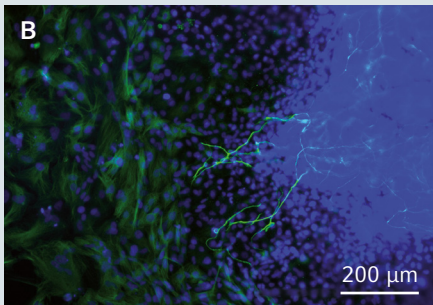
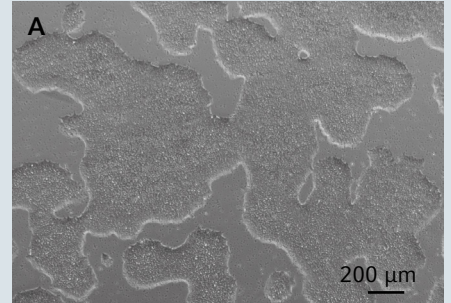


- > **Optimized temperature stability during handling outside the incubator** with inter-well space filling
- > **Safer transport in stacks** with stacking aid on the lid
- > **Increased handling safety** with easy differentiation of lid and plate

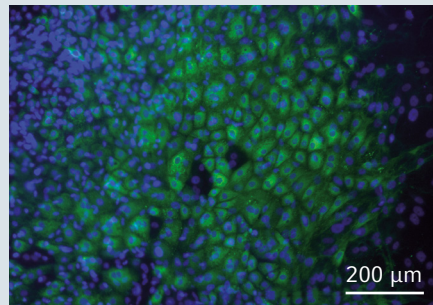
NEW: Now available as 96-well plate

hiPSCs: Efficient long-term expansion of hiPSCs in a completely synthetic culture system

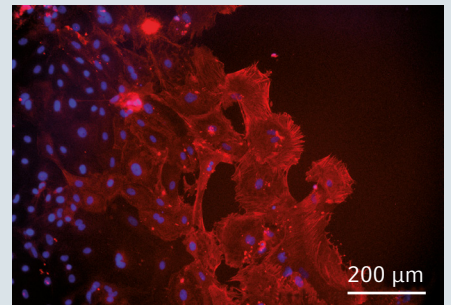
- > Supports efficient long-term hiPSC expansion in a completely defined, animal- and human-component-free culture system for 25 passages
- > Consistent and robust growth rate
- > Typical morphology remains stable (Fig. 1A)
- > hiPSCs remain undifferentiated and maintain functional pluripotency
- > Maintenance of trilineage differentiation potential after long-term expansion (Fig. 1B) while exhibiting normal genomic integrity



Ectodermo
TUJ1/DAPI



Endodermo
AFP/DAPI

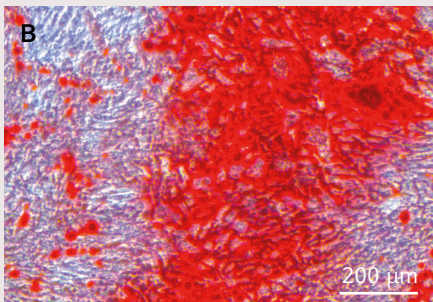
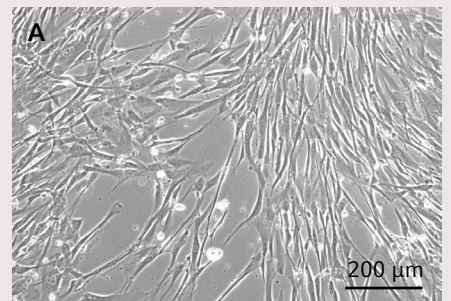


Mesodermo
SMA/DAPI

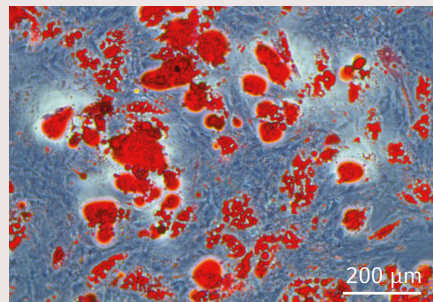
Fig. 1: Cell morphology (Fig. A) and trilineage differentiation potential (Fig. B) after long-term expansion of hiPSCs on the CCCadvanced® FN1 motifs surface

hMSCs: Animal-component-free expansion of human mesenchymal stem cells

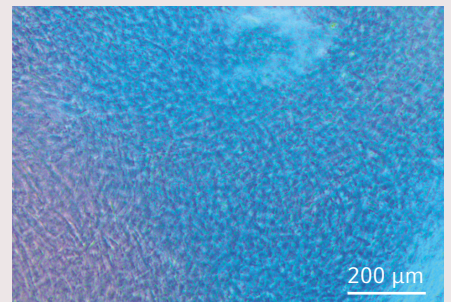
- > Supports efficient hMSC proliferation in a completely animal-component-free environment even on long term (up to 10 passages)
- > Characteristic morphology (Fig. 2A) remains stable for 10 successive passages without signs of replicative senescence
- > Stable and robust proliferation rate
- > Validated with hMSC from different tissue origins
- > Undifferentiated hMSCs retain their multi-lineage differentiation potential after expansion (Fig. 2B)



Osteogenic differentiation



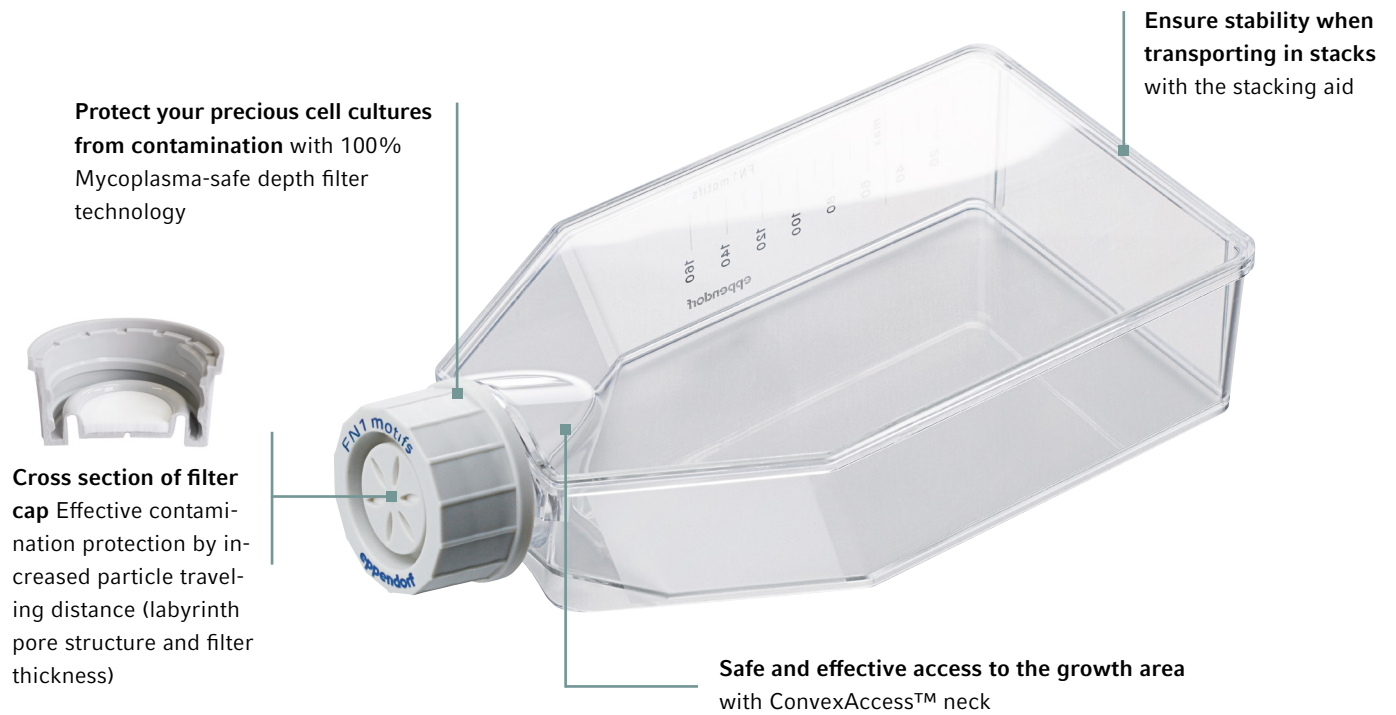
Adipogenic differentiation



Chondrogenic differentiation

Fig. 2: Cell morphology (A) and multi-lineage differentiation potential (B) of hMSC-BM after long-term expansion on the CCCadvanced® FN1 motifs surface in an animal-component-free environment

High Performance Cultureware.



Also available: High-performance cultureware for self-coating



> More information about cultureware for self-coating?
Click or scan to follow: www.eppendorf.com/ccc

CCCadvanced® FN1 Motifs Cultureware

Materials

Material	Polystyrene, meets requirements of USP Class VI
Quality Management System (QMS)	Manufactured in compliance to the standard QMS requirements (e.g. ISO 13485)
Surface	Coated with synthetic RGD-derived motifs (optimized steric configuration to mimic ECM proteins)
Xeno-free	Manufactured by using animal- and human-component-free materials
Compatibility	Compatible with a broad range of cell dissociation reagents as well as serum-, animal- and human component-free media. More information on: www.eppendorf.com/ccc-advanced-shop

Ambient Conditions

Working Temperature	15 °C to 37 °C
Storage and shelf life	Shelf life of 36 months from date of manufacture (stored dry at 15 °C to 30 °C)

Certificates

General	<ul style="list-style-type: none"> > Leachables > Trace metal release > Production conditions > Purity and cytotoxicity
Lot-specific	<ul style="list-style-type: none"> > Free from RNase/DNase, human DNA, bacterial DNA, endotoxins > Sterility assurance level (SAL 10⁻³) > Cell growth test



Papers on Detailed Expansion Analysis

eppendorf

APPLICATION NOTE 389

Ready-to-use Eppendorf CCCadvanced™ FN1 Motifs Surface for Xeno-Free Expansion of Human Pluripotent Stem Cells

Authors: Frank, A. et al. (2018) | <https://doi.org/10.1007/s12015-018-0600-0>

hiPSCs - Long-term expansion

Analysis of growth rate, morphology and differentiation potential during 20 successive passages + comparison to Corning® Matrigel®

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www.eppendorf.com/appnote389

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APPLICATION NOTE 390

Reliable and Robust Animal-Component-Free hMSC-BM Expansion on Ready-to-Use Eppendorf CCCadvanced™ FN1 Motifs Surface

Authors: Frank, A. et al. (2018) | <https://doi.org/10.1007/s12015-018-0601-1>

hMSCs-BM - Long-term expansion

Analysis of growth rate, morphology and differentiation potential during 10 successive passages + comparison to competitors

Click or transfer to follow:
www.eppendorf.com/appnote390

Website Cell Handling Solutions – Support for your needs

- > Tips and Tricks for daily routine
- > Teaching Support
- > Info Posters
- > Tool guidelines
- > Large-scale cell culture (Bioreactors)
- > Webinars and Trainings



> Click or scan to follow:
www.eppendorf.com/cellexperts

Ordering information

Description

CCAdvanced® FN1 motifs Cell Culture Plates, 6-well,
 with lid, flat bottom, sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 5 plates, individually wrapped

CCAdvanced® FN1 motifs Cell Culture Plates, 24-well,
 with lid, flat bottom, sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 5 plates, individually wrapped

CCAdvanced® FN1 motifs Cell Culture Plates, 96-well,
 with lid, flat bottom, sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 5 plates, individually wrapped

CCAdvanced® FN1 motifs Cell Culture Flasks, T-75,
 with filter cap, sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 5 flasks, individually wrapped

CCAdvanced® FN1 motifs Cell Culture Flasks, T-175,
 with filter cap, sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 5 flasks, individually wrapped

CCAdvanced® FN1 motifs Cell Culture Dishes, 35 mm,
 sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 18 dishes (3 bags × 6 dishes)

CCAdvanced® FN1 motifs Cell Culture Dishes, 60 mm,
 sterile, free of detectable pyrogens, RNase, DNase, DNA
 Non-cytotoxic, 18 dishes (3 bags × 6 dishes)

International Order no.

0038 110 010

0038 110 030

0038 110 050

0038 120 020

0038 120 030

0038 130 010

0038 130 020

Test for yourself:

> Request a sample or further support: www.eppendorf.com/ccc-advanced-shop

Your local distributor: www.eppendorf.com/contact

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