PRODUCT DATA SHEET

Collagen Cell Carrier (CCC)

Product Description

CCC scaffolds are membranes of ca. 20 µm thickness, made of pure collagen type I fibers from bovine dermis without treatment with chemical cross-linkers. The compact fiber network is non-porous but permeable for most soluble factors.
Specially formatted discs are available for use in cell culture multi well plates or dishes. The 50 x 50 mm or 150 x 100 mm format can be cut by the customer according to his requirements with sterilized scissors or a scalpel for use in any cell culture vessel.
The CCC is delivered dry, sterile and individually packed. Before cell seeding it needs to be attached (reversibly) to the bottom of a cell culture-treated well plate without the need of any auxiliary compound. To ensure proper adhesion of the CCC to the well the recommended user protocol should be used.

At a glance

- ultra-thin and translucent membrane
- For multi wellplates in different sizes (6w– 96w) and other formats available
- Collagen type I from bovine dermis

Benefits

- ✓ Environment provides natural signals for cells
- ✓ Proven biocompatibility and biodegradability in vivo
- ✓ Thin (20µm), strong and elastic, suturable even in wet conditions
- ✓ Better survival of implanted cells - ideal tool for cell and tissue implantation
- ✓ In research and medical grade quality for easy bench-to-bedside-translation

Product Specifications

Parameter	Collagen Cell Carrier
Source	bovine dermis, age ≤ 30 months
Appearance	Thin translucent collagen membrane
Thickness (µm)	20
Sterilization dosis	>25 KGy (Gamma radiation)
Biocompatibility (WST-1 Test)	Yes

Product Use

Passaging For cell passaging or preparation of cell suspensions (e.g. for flow cytometry) standard detachment procedures can be used to detach adherent cells from the CCC. *An Application Note for detachment of cells is available.*

Implantation for research & development CCCs exhibit excellent biocompatibility *in vivo*. In various *animal* experiments degradation was observed *within* several weeks post implantation, depending on the target organ, without notable immunoreaction.

Histological analysis Fixation of cells on the CCC can be performed by all standard fixation protocols like e.g. paraformaldehyde, buffered formaldehyde, glutardialdehyde, acetone or methanol.
The CCC can be frozen or embedded in paraffin or epoxy resins (e.g. EPON) and sliced with a cryostat or microtome, respectively. The scaffold is also suitable for electron microscopic investigations.

SUPPORT

phone +49 06201 86-358
sales@bio.viscofan.com

Viscofan BIOENGINEERING
Your partner for medical collagen

PRODUCT DATA SHEET

Collagen Cell Carrier (CCC)

Product description

Storage

The originally packed Collagen Cell Carrier should be stored dry and in the dark between +15°C and +25°C in closed packaging.

Storage life

60 months from the date of manufacture

Intended use

Collagen Cell Carrier (CCC) is intended for research use only. They are neither intended for human nor animal diagnostic, therapeutic use or any other clinical uses!

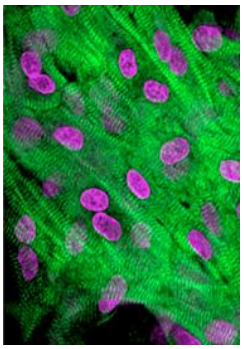
Corresponding documents:

- User Protocol - Collagen Cell Carrier (CCC)
- Application Note - Detachment of cells cultured on Fibrous Collagen Surfaces
- Application Note - DiIC Staining of cells grown on Fibrous Collagen Surfaces

Viscofan BioEngineering
A Business Unit of Naturin Viscofan GmbH
Badeniastraße 13
69469 Weinheim, Germany
Phone +49 (0)6201 86-358
Fax +49 (0)6201 86-226
sales@bio.viscofan.com
www.viscofan-bioengineering.com

REVISION DATE: XX.XX.2021

Immunofluorescence The ultra-thin and translucent membrane exhibits a very low autofluorescence which makes the scaffold applicable for fluorescent imaging of cultured cells.
The cells can be fixed and the staining procedure can be carried out directly on the cell seeded scaffold in the well. *After staining the scaffold can be removed and transferred to a glass slide*.

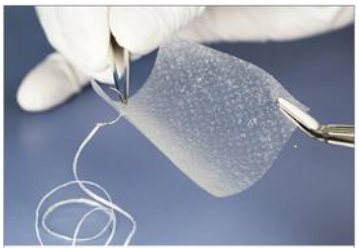


Metabolic analysis of cells with colorimetric methods Cell viability on the CCC can be monitored by colorimetric methods (tetrazolium based) according to the manufacturer's recommendations.

Applications

The CCC is *a biocompatible matrix* for the growth of various *adherent* cell types, representing an *in vivo*-like collagen for use in conventional cell culture-treated well plates. It is produced in a standardized, industrial process. The CCC can be used for:

- Universal culture of adherent cells
- Tissue engineering & regenerative medicine
- Implantation and fixation of cells
- Development of Advanced Therapy Medicinal Products (ATMPs)
- Co-culture of cells on both sides
- Sectioning for histologic analysis
- Fluorescent imaging of adhered cells



We welcome your feedback!
sales@bio.viscofan.com

Viscofan BIOENGINEERING
Your partner for medical collagen