

### Product Description

CBT are sterile, non-porous tubes made of pure, bovine collagen type I fibers without treatment of chemical cross-linkers intended for cell cultivation.

The CBTs are delivered dry, sterile and individually packed.

Before cell seeding the tubes need to be rehydrated and equilibrated with cell culture medium. To ensure good performance please follow our User Guide.



Collagen Bio Tubes may be transferred using forceps

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### PRODUCT SPECIFICATIONS

Parameter	Collagen Bio Tubes
main component	collagen type I fibers
Source	bovine dermis, animal age $\leq$ 30 months
Appearance	Thin translucent collagen tube
Length [mm]	30 or 60
Diameter [mm]	2.5 or 4.5
Sterilization	✓ (gamma irradiation)
Cytocompatibility (cell growth)	✓

### APPLICATIONS

CBTs are designed as a tubular, *in vivo*-like collagen scaffold for use in bioreactors or conventional cell culture-treated well plates. They are best suited for cultivation of adherent primary cells, stem cells and cell lines, allowing cells to grow both, at the inside and outside of the tube wall.

The CBT also allows the combination with additional matrix molecules and/or growth factors enabling studies on cell differentiation and development as well as tissue engineering.

Additionally, their high mechanical strength permits an easy and sterile translocation of the intact cell-scaffold complex e.g. for transplantation experiments or histological analyses. Their length can be flexibly adjusted to need by cutting with sterilized scissors or a scalpel in the wet condition.

CBTs are produced with a standardized, industrial process.

### BENEFITS

- ✓ Tubes from highly purified collagen type I fibers
- ✓ Excellent biocompatibility for cells
- ✓ Standardized production process including DIN ISO 9001 certified quality management system
- ✓ Two diameters available and trimmable length
- ✓ Cells can grow at the in & outside of the tubewall
- ✓ Suited for bioreactors

### PRODUCT USE

After conditioning the CBT following the User Guide, cells can be seeded and cultured on the in- or outside of the CBT in a bioreactor or sterile vessel.

### Immunofluorescence

CBT are suitable for fluorescent imaging of cultured cells due to their very low autofluorescence. Cells can be fixed and the staining procedure can be carried out directly on the cell seeded tube.

### Histological analysis

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

### Metabolic cell analysis with colorimetric methods

Cell viability and growth of cells on and in the CBT can be monitored by colorimetric methods (tetrazolium-based salts such as WST-1) according to the manufacturer's recommendations.



### Intended use

CBT are intended for research use only. They are neither intended for human nor animal diagnostic, therapeutic use nor any other clinical use.

### Certified quality

Produced under ISO 9001 quality management system.

### Storage

The originally packed CBT 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.

### Corresponding documents

- [User Guide](#)  
Pre-treatment of Collagen Bio Tubes (CBT)
- [Application Note](#)  
Staining of cells grown on fibrous collagen surfaces

### Technical support

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### Disclaimer

*All data and recommendations correspond to the present state of our knowledge; they are published without engagement. We reserve the right to make alterations and additions in line with technical developments without prior notice. The customer is obliged to check whether our products meet her/his technical requirements. Please contact us for questions or support.*

### ORDERING INFORMATION

Catalog numbers vary with respect to CBT length & diameter.

#### USA & CANADA

Order comfortably through VWR:



#### OTHER REGIONS

Browse our website to find the right product for your needs or contact us:



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