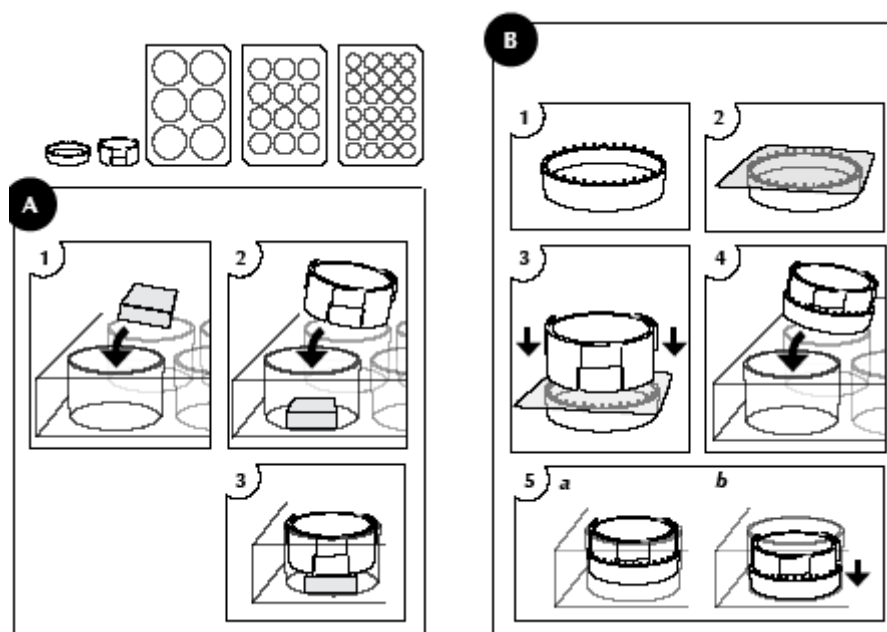


CellCrown™ inserts

CellCrown™ inserts immobilize a sample (e.g. fibre, foil, membrane, textile, block-like or tissue sample) in the well of a well plate.

- Material is medical grade polycarbonate
- The single inserts are available for 6, 12 and 24-well plates.
- The sample is assembled between the body part and the ring (Figure B, 1-3).
- The ring is looser, when the teeth are upwards and tighter, when the teeth are downwards (Figure B, 1).
- This allows attachment of different thicknesses of samples.

- The single inserts works the best with the samples of thickness 70 – 200 µm.
- The height of the inserts can be adjusted in the well (Figure B, 5).
- For thicker samples the body part can be used alone, on the top of the sample (Figure A).
- The inserts are tested with Corning and Nunc well plate models and they work with others, too, when the inner diameter of the wells is within the same range (Table 1).
- The inserts are available as sterile (gamma-irradiated) and non-sterile.
- These inserts are for single use, only. The small holes are difficult to clean and may cause cross-contamination if reused.
- This is the only cell culture insert in the market, which is provided as empty and which is easy to load with the researchers own sample material.



Applications

Up to date CellCrown™ cell culture inserts have been used in cell culturing experiments in the research of biomaterials, tissue engineering, regenerative

medicine, pharmaceuticals, cancer models, and skin substitutes for animal free testing. The studied materials have been varying from biological tissue samples to completely synthetic ones, these studies are listed in Scaffdex web site.

Table 1. Single CellCrown™ dimensions

Dimensions	CellCrown™6	CellCrown™12	CellCrown™24
Outer diameter of the body	27 mm	17 mm	12 mm
Inner diameter of the body	26 mm	14 mm	10 mm
Inner surface area	5.3 cm ²	1.54 cm ²	0.79 cm ²
Height of the body	12 mm	12 mm	12 mm
Inner diameter of the ring	28 mm	17.5 mm	12.5 mm
Height of the ring	3 mm	3 mm	2.5 mm
Suitable sample sizes in diameter	> 32 mm	> 20 mm	> 15 mm
The recommended thickness of sample	0.05-0.3 mm Thicker samples can be handled with the body part alone	0.05-0.3 mm Thicker samples can be handled with the body part alone	0.05-0.3 mm Thicker samples can be handled with the body part alone
The applicable well plate	Standard 6-well plate, like Nunc and Corning	Standard 12-well plate, like Nunc and Corning	Standard 24-well plate, like Nunc and Corning
Structural feature	Single	Single	Single

CellCrown™ can be used to assist chitosan film preparation. Further information and instructions can be found in web site www.scaffdex.com, section research, Chitosan film preparation with the help of CellCrown. With hydrogels CellCrown™ with porous filter is recommended. The product selection with different membranes is listed in Table 2. CellCrown™ with filters are always provided as sterile.

Table 2. Single CellCrown™ available product selection

CellCrown	Non-sterile	Sterile	With polycarbonate filter 1.0 µm	With nylon filter 1.2 µm	With nylon filter 5.0 µm	With PET filter 8.0 µm
CellCrown™24	x	x		x	x	x
CellCrown™12	x	x		x	x	x
CellCrown™6	x	x	x		x	x