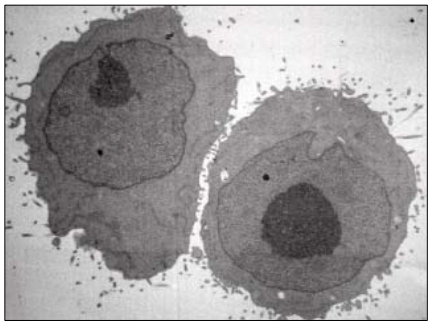
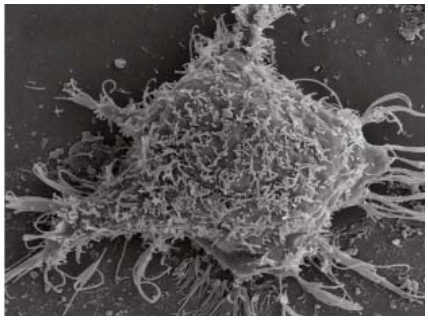
Correlative Microscopy Coverslips®

A unique film reticle for use in Correlative Microscopy with applications in LM, SEM, TEM, High Pressure Cryofixation etc. Designed to specifically allow identification and location of a particular area of interest under brightfield or fluorescence microscopy and sectioning for electron microscopy. The reticle film has been thoroughly tested with cell cultures showing good cell growth and strong adhesion to the substrate without the use of poly-L-lysine. Please ask for data sheet explaining limitations with Fluorescence microscopy.





All Correlative Microscopy Coverslips® are produced on a polyester based film, 0.18mm thick, 22mm x 22mm. 25pcs per box.

Physical and Chemical Properties

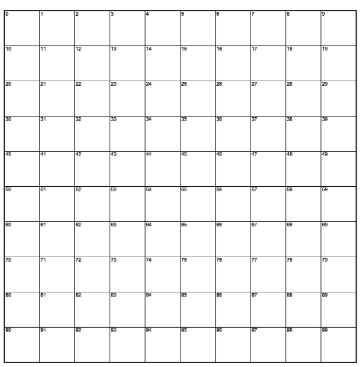
- Resistant to normal chemicals used in electron microscopy
- No oxygen retention, compatible with LR White resin
- Excellent optical quality in brightfield & UV fluorescence
- Temperature range +100ºC to –196ºC
- Rigid - does not float in middle of culture
- Easy to handle and cut with a knife or micro-punch
- Simple sterilisation using alcohol or UV
- Detaches easily from resin after polymerisation
- Low cost

Using the Correlative Microscopy Coverslip

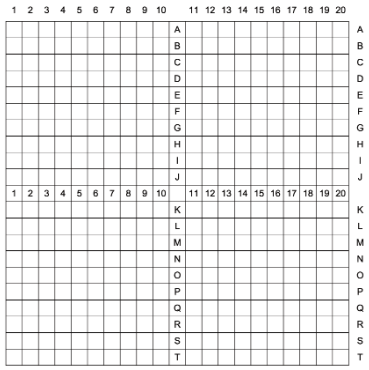
1. Sterilise the coverslip with alcohol then dry and add the culture
2. Ensure the grid is correctly positioned so the text is readable
3. Observe the cell culture using LM and identify area of interest
4. Record the images needed and note the co-ordinates of the relevant squares
5. Fix, dehydrate and embed with resin for TEM
6. After the embedding procedure invert a Polythene capsule filled with resin on the coverslip covering the cells of interest
7. Cure the resin and detach the coverslip. The footprint of the grid allows location of the position. Trim the block in the selected area and section on an ultramicrotome.

How to Choose the Appropriate Coverslip

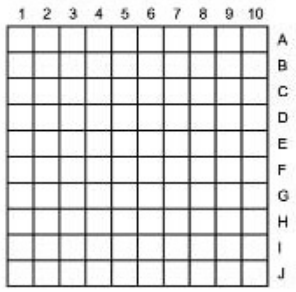
Pattern Code	Number of Squares	Surface Covered	Unit Size of Each Square	Average no. of Cells/Square Unit (e.g. Hela Cell)
CMC34A	100	5 x 1mm²	0.01mm²	2-3
CMC71	200	100mm²	0.5mm²	20-25
CMC35	100	100mm²	1mm²	40-50



CMC35
10x10 grids of 1mm squares. Each square individually indexed 0-99



CMC71
20x20 grid of 0.5mm squares. Indexed 1-20 along top, A-T down side and on centre cross



CMC34A
10x10 grids of 0.1mm squares at 5 positions. Indexed 1-10 along top and A-J down side

A

B

C

D

E

Ordering Information

M452 CMC34A 22 x 22mm 25pcs
M453 CMC71 22 x 22mm 25pcs
M454 CMC35 22 x 22mm 25pcs