

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.

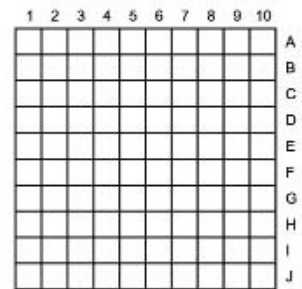
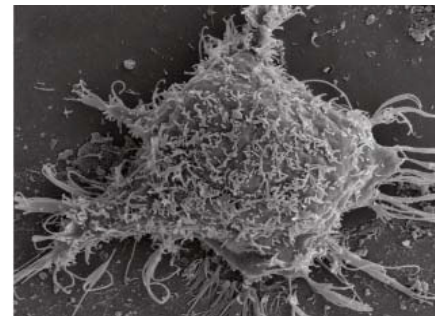
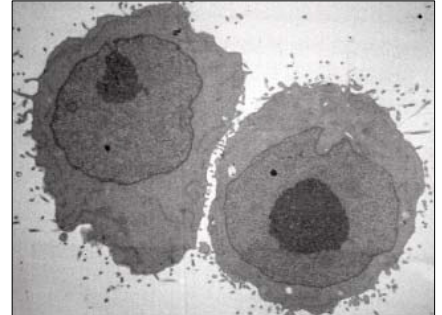
All Correlative Microscopy Coverslips® are produced on a polyester based film, 0.18mm thick, 22mm x 22mm. 25pcs per box.

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 +100°C to -196°C
- 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.



CMC34A

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



A



B



C



D

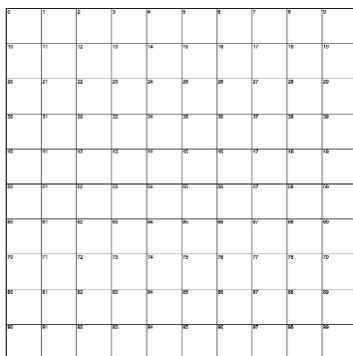


E

How to Choose the Appropriate Coverslip

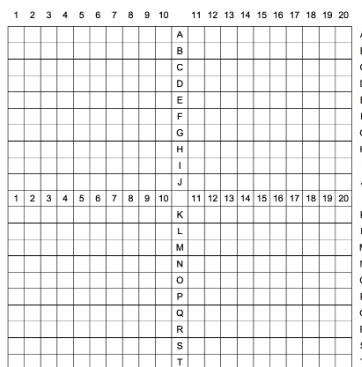
| Pattern Code | Number of Squares | Surface Covered | Unit Size of Each Square | Average no. of Cells/Square Unit (e.g. Hela Cell) |
|--------------|-------------------|-----------------|--------------------------|---|
|--------------|-------------------|-----------------|--------------------------|---|

| | | | | |
|--------|-----|----------------------|---------------------|-------|
| CMC34A | 100 | 5 x 1mm ² | 0.01mm ² | 2-3 |
| CMC71 | 200 | 100mm ² | 0.5mm ² | 20-25 |
| CMC35 | 100 | 100mm ² | 1mm ² | 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

Ordering Information

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