agar scientific
a brand of Elektron Technology
Unit 7, M11 Business Link
Parsonage Lane, Stansted
Essex, UK CM24 8GF
t: +44 (0)1279 813519
f: +44 (0)1279 815106
e: sales@agarscientific.com
w: www.agarscientific.com

Thermanox® Coverslips AGL4351, 52 , 53, 54, 61, 62

Purpose: Cell attachment and growth is equal to or better than polystyrene plastic or glass.

Resistant to all commonly used solvents (xylene, acetone, acetic acid) so you can use them with most staining techniques and with regular mounting and embedding materials.

Use with amyl acetate for EM preparations.

Very low vapour and gas permeability properties.

Suitable for use in scintillation counting.

Warning

*Coverslips are packaged "***RIGHT SIDE UP."** *To assure best orientation for cell growth, keep coverslips in package until ready for use. When removing from package, use the side facing labelled top of package for best cell growth.*

DO NOT FLAME THERMANOX COVERSLIPS.

DO NOT HANDLE WITH RUBBER GLOVES OR OTHER RUBBER PRODUCTS. Most rubber is toxic to cells and the toxic agent is transferred to the THERMANOX surface.

NOT RECOMMENDED for phase contrast microscopy or techniques involving fluorescent stains.

Suggestions for Use

Cut to special shapes or sizes with sterile scissors.

To prevent scratches, handle only by the corner or edges, preferably with sterile forceps.

A pick-up tab may be formed by bending one corner to a right angle with sterile forceps.

Re-sterilise, if necessary, with 70% isopropyl alcohol or exposure to ultraviolet light overnight.

22 x 60mm coverslip may be used with LUX 4-well MULTIPLATE™.

10.5 x 22mm coverslip may be used with LUX AMBITUBE™.

22mm or 25mm round coverslip may be used with LUX 35 x 10mm dish, 8-well MULTIPLATE or Sykes chamber.

After embedding, you may peel THERMANOX coverslips off the epoxy, leaving cells or other objects in the mounting material or you may section them with the mount.

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Note: *THERMANOX coverslips may float due to air bubbles or surface tension. Air bubbles may form when the coverslip is placed in the medium, or if the medium is below incubator temperature. Bubbles may form as the medium comes up to temperature releasing dissolved gas.*

Coverslips may be pushed to the bottom of a dish or other container with sterile forceps, pipette or gentle agitation. In Leighton tubes, a gentle shake will cause the coverslip to settle to the bottom of the vessel.

To Prepare Semi-Permanent or Permanent Preparations for Light Microscopy:

1. *Fix cells grown on THERMANOX coverslips in methanol, acetone or other fixative.*
2. *Stain.*
3. *Dehydrate in acetone.*
4. *Clean in Xylene.*
5. *Cover with a mountant.*
6. *Place clear glass coverslip on top.*

Examine the cells through the glass coverslip and mountant for improved resolution.

To Prepare for Transmission Electron Microscopy:

1. *Fix cells with routine fixative (glutaraldehyde).*
2. *Post fix with osmium tetroxide. Rinse and pre-stain if desired.*
3. *Dehydrate in ethanol followed by propylene oxide.*

4. *Infiltrate with Epon.*
5. *Invert on previously polymerised Epon blank, wipe back and polymerise.*

Remove coverslip by inverting on a warm hotplate and peeling off or by touching coverslip to dry ice. The coverslip will peel off leaving the cells on the Epon block

References

1. *Buckley, C.E. Coverslips for Use in Tissue Culture. Laboratory Equipment Digest. May, 1976.*

2. *Deter, R.L. Quantitative Morphological Analysis of Early Mouse Embryogenesis in Vitro. Perfusion Culture System. Tissue Preparation; Sampling. Journal Embryol. Exp. Morph. 40:90-100. 1977.*

3. *Pauli, B.U., Anderson, S.N., Memoli, V.A., and Kuettner K.A. Development of an in Vitro and in Vivo Epithelial Tumor Model for the Study of Invasion. Cancer Research. 40:4571-4580. December, 1980.*

4. *Werb, Z., Bainton, D.F., and Jones, P.A. Degradation of Connective Tissue Matrices by Macrophages. Journal of Experimental Medicine. 152:1537-1553. December, 1980.*

5. *Swierenga, S.H.H., Whitfield, J.F., and Morris, H.P. The Reduce Extracellular Calcium Requirement for Proliferation by Neoplastic Hepatocytes. In Vitro. 14 No. 6. 527-535. 1978.*

6. *Zembala, M., Lemmel, E.M., Uracz, W. Activation of Human Monocytes for Nitroblue Tetrazolium Reduction and the Suppression of Lymphocytes Response to Mitogens. Clin. Exp. Immunol. 41:309-316. 1980.*