

UranyLess in Acetone

New version of stain in block for AFS & Cryo applications

UranyLess in Acetone is a reagent used for cryo-electron microscopy applications, particularly for freeze substitution techniques (AFS).

This product serves as a safer alternative to traditional uranyl acetate, providing a solution for biological sample preparation while ensuring high-resolution imaging.

Applications: Freeze substitution (AFS), electron microscopy, cryo-applications.

Reference: 11000C-100

Format: 100 ml



Collaboration

Pr. Dagmar Kolb-Lenz,
Gottfried Schatz
Research Center;
Medical Univ. of Graz
Austria

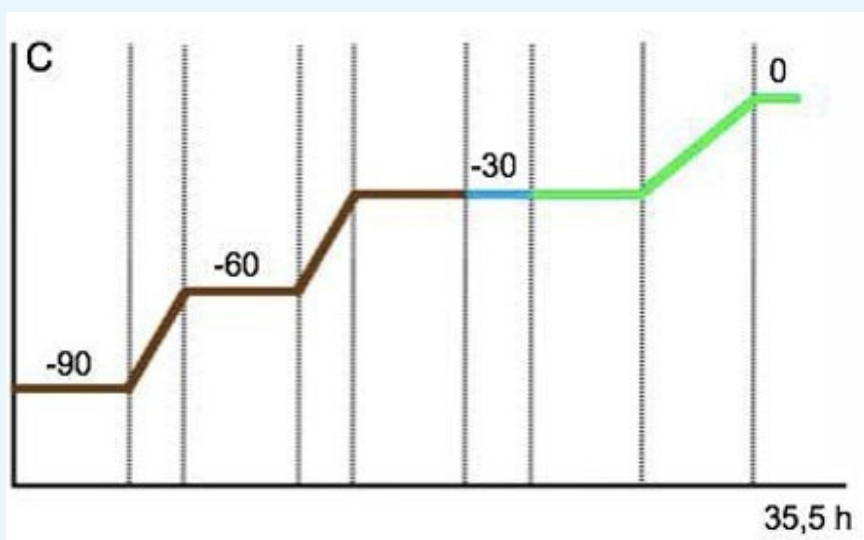
Nacer Benmeradi, PhD
R&D Delta
Microscopies France

Protocol: UranyLess Acetone version cryo for AFS application staining sample on block:

1-Cryofixation BeWo cells cultures on Safir disc by EM HPM 100

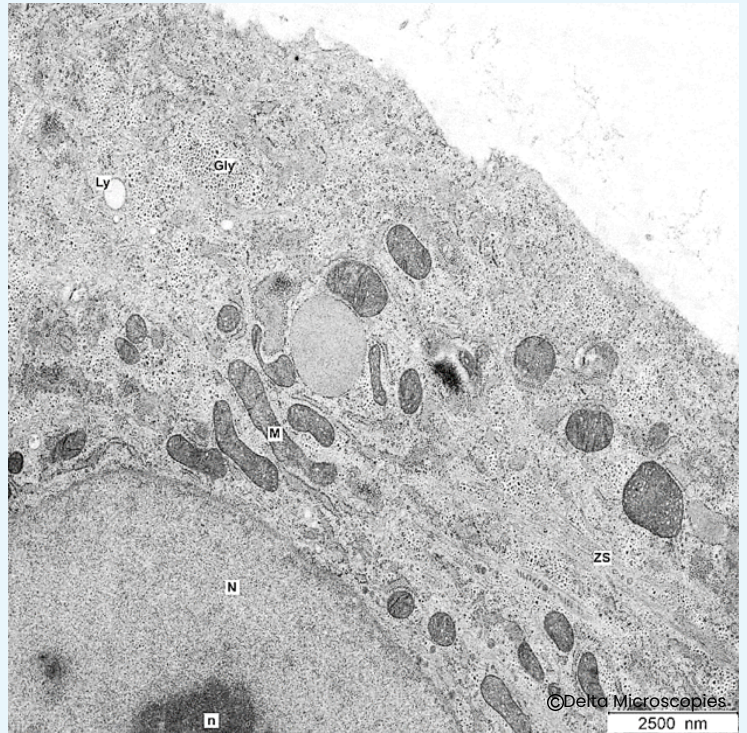
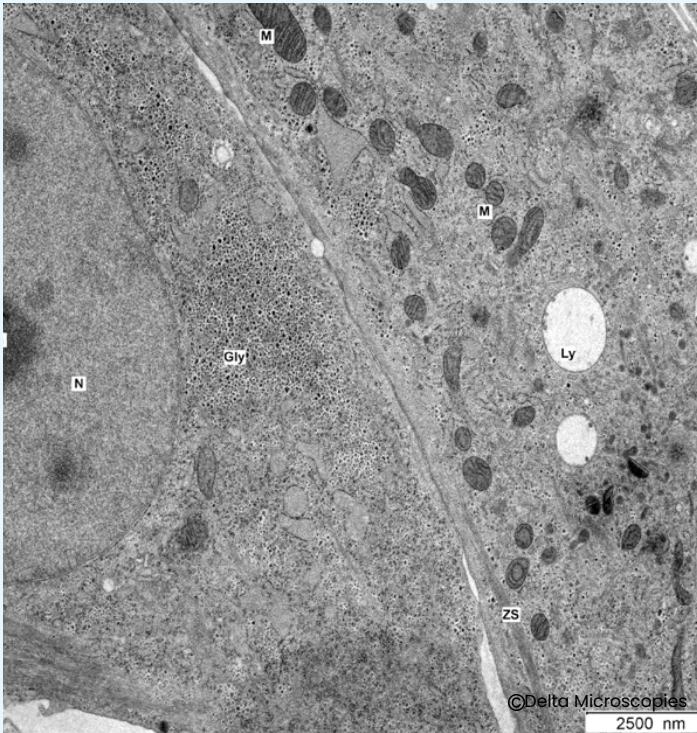
2-AFS Protocol :

- 8 hours 2% OsO₄/ acetone solution at -90°C
0.5-hour temperature increase
- 8 hours 2% OsO₄/acetone solution at -60°C
0.5-hour temperature increase
- 8 hours 2% OsO₄/acetone solution at -30°C
- Remove OsO₄ solution and add pure acetone
- 1 hour pure acetone washing
- Remove acetone and add UranyLess acetone version cryo for AFS application (**#11000C-100**)
- 8 hours UranyLess acetone version(#11000C-100) at -30°C (stain on bloc)
- 1.5 hours temperature increase
- 0°C End of AFS



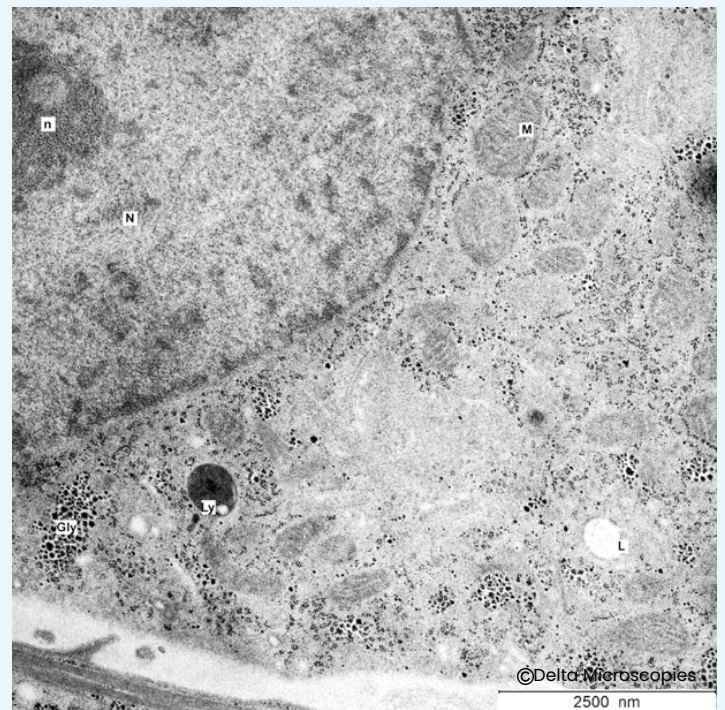
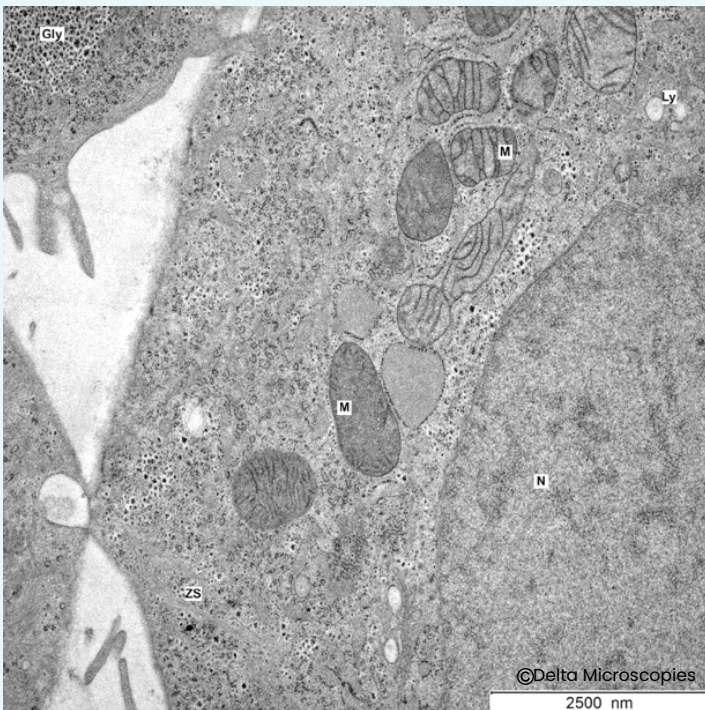
As soon as 0°C was reached, the samples were washed once with distilled acetone and subsequently embedded in Epon resin at room temperature.

Cryo fixation high pressure, Cryo Substitution AFS with UranylLess Acetone, include Epoxy resin, Electron microscopy of sample ultra-section.



With Uranylless Cryo:
membranes are clearly visible

Without Uranylless Cryo :
we didn't distinguish membranes



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