

Bio TEM sampling

생체시료 TEM 시편 준비

Sampling procedure

- Biological specimens : Fixation, dehydration, embedding, microtomy, staining
- Material specimens : Embedding, microtomy, staining

Cryo-ultramicrotome system

Ultramicrotome : Reichert (Ultracut S)

Ultrathin seeting

- Section thickness : 50 nm ~ 2 um
- Cells, tissue, polymer

Cryo chamber : Reichert (FCS)

Chamber for low temperature sectioning

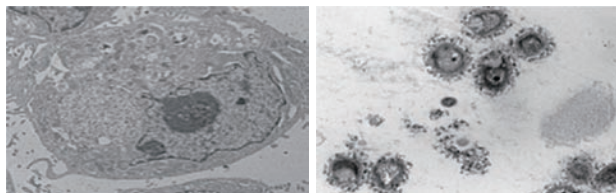
- Temperature : -80 °C ~ -140 °C
- Liquid nitrogen usage



Location L5113 Tel.02-958-5987

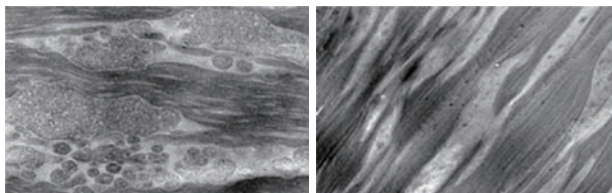
Microtomy in room temperature

- Room temperature sectioning of resin embedded specimens



Cryo-microtomy

- Low temperature sectioning of frozen specimens



Cryo sampling machines

Plunge freezing



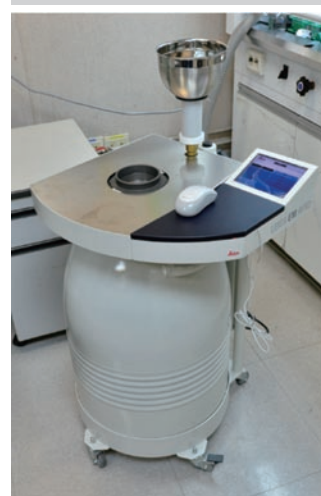
- FEI (Vitrobot)
- Freezing thickness : ~10 um
- Holey carbon grid
- Specimen : Proteins, virus, soluble particles

High pressure freezing



- Leica (HPM100)
- Freezing thickness : ~200 um
- Carrier size : 3 mm, 6 mm
- Specimen : Cultured cell, animal/plant tissue, biopsy

Freeze substitution



- Leica (EM AF52)
- Freeze substitution, progressive low temperature processing (PLT), low temperature embedding
- LED illumination