

Microtomy Artifact Troubleshooting Poster

Artifact	Likely causes	Corrective actions
Compression	Warm block, dull blade, low clearance, cutting too fast	Cool block, use fresh blade area, optimize clearance and speed.
Chatter / venetian blind	Hard/brittle tissue, excessive clearance, loose parts	Soften/cool appropriately, reduce clearance, tighten holder, slow cutting.
Knife lines	Nick in blade, hard debris, calcification	Move/replace blade, clean block face, assess for residual mineral.
Thick-thin sections	Loose clamp, wax inconsistency, feed issue	Tighten components, verify wax and microtome maintenance.
Folds / wrinkles	Poor flotation, damaged section, bath too cool	Optimize bath temperature and section placement; avoid overheating.
Section lifting	Dirty/incorrect slide, inadequate drying, harsh retrieval	Use validated charged slides, drying, and retrieval conditions.
Floaters	Contaminated bath/tools, shared debris	Clean bath and tools; change water; document contamination event.