

How to use

These quick cards summarize high-yield orientation rules by specimen type. Each card: Goal • Do • Avoid • Notes. Print and keep near the embedding center.

Goal: epidermis & adnexa in one plane.
Do: Orient epidermis perpendicular to knife; keep edges same level.
Avoid: Rolled edges, chatter from overheated blocks.
Notes: Support tips; cool quickly on cold plate.

Skin (shave/excision)

Goal: even epidermis/dermis across ellipse.
Do: Long axis perpendicular to knife; support tapered ends.
Avoid: Curling at tips; sloped placement.
Notes: Center specimen in mold.

Skin ellipse

Goal: villi/crypts intact & readable.
Do: On edge, mucosa out.
Avoid: mucosa-on-mucosa piles.
Notes: Use biopsy sponges/mesh.

GI mucosa (biopsies)

Goal: wall layers + lumen cross-section.
Do: Cross-section perpendicular to knife.
Avoid: Oblique/longitudinal unless specified.
Notes: Align multiple pieces consistently.

Tubular (vas/vessels)

Goal: intact epithelial lining.
Do: Place wall on edge.
Avoid: Collapsing lumen.
Notes: Ensure full infiltration.

Cysts

Goal: capsule & subcapsular sinus.
Do: Capsule perpendicular to knife.
Avoid: Tilted blocks losing the sinus.
Notes: Avoid excessive heat.

Lymph node

Goal: fiber diameter assessment.
Do: Transverse for routine; long axis if neuropath req.
Avoid: Crush & thaw artefact (prefer cryo enzymes).
Notes: Record orientation.

Muscle (bx)

Goal: endoneurium/perineurium detail.
Do: Cross-section.
Avoid: Longitudinal unless ordered.
Notes: Support with proper paraffin MP.

Nerve

Goal: glomeruli and cortex features.
Do: Present cortex; cut 2–3 μm for PAS.
Avoid: Thick sections obscuring detail.
Notes: Gentle water bath temperatures.

Kidney

