

Technical Data Sheet

Imidazole

#16905

Imidazole is a liquid enhancing buffering agent that, when used with 4% osmium tetroxide solution as a post-fixation for tissue blocks, produces a prominent electron-opaque staining of lipid droplets with no evidence of diffusion.

Procedure:

Tissue is fixed by vascular perfusion with 1.5% glutaraldehyde in 0.1M cacodylate buffer (pH 7.4) containing 4% polyvinyl pyrrolidone and 0.05% CaCl₂. Sections about 50um thick are cut and placed in 0.2M Imidazole in which 4% aqueous OsO₄ is added.

The final concentration of OsO₄ is 2% and the pH is 7.5. Note that the tissue must first be placed in Imidazole buffer; then the OsO₄ is added. This post-fixation is carried out for 30 minutes at room temperature.

Reference:

Angermuller, S., Fahimi, H. Histochem. Journal 14, 823-35 (1982).