



The University of Sydney & Royal Prince Alfred Hospital
NEUROLOGY LABORATORY

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Analysis on Muscle Biopsy

Histochemical, Enzymehistochemical & Immunocytochemical stains are usually performed on frozen, unfixed tissue.

Standard Panel of Stains: Performed on all biopsies.

- Haematoxylin and Eosin (H&E)
- Gomori Trichrome
- ATPase pH 9.4 & 4.3
- Succinic Dehydrogenase (SDH)
- Cytochrome Oxidase/Succinic Dehydrogenase double stains (COX/SDH)
- Periodic Acid Schiff (PAS)
- Acid Phosphatase
- Esterase
- Congo Red for amyloid
- MHC Class I (IHC)

Special Stains: Performed when needed.

- Myoadenylate Deaminase
- Myophosphodrylase
- Phosphofructokinase
- Oil Red O Stain for Lipid
- NADH-TR
- Verhoeff's Elastic Fibre Stain
- Ziehl-Neelson Stain for Acid Fast Bacilli (Modified)
- Touluidine Blue on Semithin Plastic Sections
- Light Chain Kappa & Lambda (IF)

- Dystrophy protein panel: Dystrophins (1, 2&3, IHC), Dysferlin (IHC & Western blot), Merosin (IHC), Calpain 3 (Western blot)

- Immune Myopathy Panel: (IHC): C5b-9 (MAC), P62, CD3, CD4, CD8, CD20, CD68.

Electron Microscopy: Performed at Concord Hospital if required.