

Mitochondrial and Autoimmune Neurological Disorders Laboratory **Department of Clinical Neurosciences & Neurological Research**

> 5th Floor Daly Wing. St. Vincent's Hospital 35 Victoria Pde Fitzroy Vic 3065 Telephone: 9231 3366 Facsimile: 9231 3350

Contact the laboratory or visit webpage for the specimen handling protocols and requisition/consent forms. Doctors must complete the clinical features sections to indicate specific tests. Patients or next of kin must read, sign the consent and fill in billing details for testing to proceed.

https://svhm.org.au/home/healthprofessionals/diagnostic-services/clinical-neuroscience

Mitochondrial diseases and some neurological disorders are hereditary which may have implications for family members. All genetic testing must be accompanied by genetic counselling.

Director of Diagnostic Lab: Professor Steve Collins

Scientists: **Dr Rosetta Marotta** Ms Judy Chin

Laboratory Hours: 9am - 5pm Mon-Fri (except public holidays). No urgent testing unless specified.

Mitochondrial disease mtDNA variant screening	
Mitochondrial Encephalomyopathy Lactic Acidosis and Stroke like episodes (MELAS)	MT-TL1 m.3243A>G MT-TL1 m.3271T>C \$240.00** MT-ND5 m.13513G>A \$240.00** Sanger Sequencing PCR/RFLP*
Myoclonic Epilepsy and Ragged Red Fibres (MERRF)	MT-TK m.8344A>G Sanger Sequencing \$240.00
Neuropathy Ataxia and Retinitis Pigmentosa (NARP) Leigh's Syndrome	MT-ATP6 m.8993T>C/G Sequencing PCR/RFLP* \$240.00**
Leber's Hereditary Optic Neuropathy (LHON)	MT-ND1 m.3460A>G MT-ND4 m.11778G>A MT-ND6 m.14484T>C Multiplex PCR/RFLP* Sanger Sequencing \$240.00**
Patients with specific phenotypic/ histopathologic evidence of mitochondrial disease	mtDNA gene mutations Targeted Sanger sequencing \$240.00 per gene**

Specimens:

Variant screening: any two of blood (2x 3ml EDTA), hair (10-20 follicles attached), urine (50ml -first morning void sent immediately), or muscle.

Muscle must be frozen immediately and sent on dry ice.

* Polymerase Chain Reaction / Restriction Fragment Length Polymorphism

**Prices + GST per specimen.

Autoimmune Encephalitis Testing	
Anti-glutamate receptor (type NMDA) encephalitis	Anti-glutamate receptor (type NMDA) N-methyl-D-aspartate Indirect immunofluorescence
Limbic encephalitis Atypical psychosis	Anti-glutamate receptor (type AMPA) α-amino-3-hydrosy-5-methyl-4-isoxazol-propion acid Indirect immunofluorescence
Limbic encephalitis	Anti-GABA _B receptor γ-amino-butyric acid Indirect immunofluorescence
Limbic encephalitis	Anti-LGI 1 Leucine –rich glioma- inactivated protein 1 Indirect immunofluorescence
Neuromyotonia Morvan's Syndrome Limbic encephalitis	Anti-CASPR2 Contactin-associated protein 2 Indirect immunofluorescence
Autoimmune encephalitis	Anti-DPPX Dipeptidyl amiopeptidase-like protein Indirect immunofluorescence

Specimens: Panel of six autoantibodies screened in Serum - >1ml SST tubes or > 60 μl of CSF sent immediately,

refrigerated (4°C) or frozen

Price: \$240.00 + GST per specimen









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