


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p>Accredited to ISO 15189:2012</p>	<h3>King's College Hospital NHS Foundation Trust</h3> <p>Issue No: 004 Issue date: 25 April 2019</p>	
	<p>Department of Clinical Neuropathology King's College Hospital NHS Foundation Trust Denmark Hill London SE5 9RS</p>	<p>Contact: Lawrence Doey Tel: +44 (0)203 299 1951 Fax: +44 (0)203 299 1956 E-Mail: Lawrence.doey@nhs.net Website: www.kch.nhs.uk/gps/neuropathology-guide</p>
<p>Testing performed at the above address only</p>		

Additional site activity performed away from the laboratory

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS</p> <p>Tissue samples</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</u></p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Specimen dissection: AFOS ventilated table Cut-up (NEURO GEN 031 and 063)</p> <p>Protocol for Handling and Reporting CNS Biopsy Specimens (except Epilepsy Surgery) using SOP NEURO GEN 046</p> <p>Protocol for Handling and Reporting Pituitary Biopsies using SOP NEURO GEN 047</p> <p>Protocol for Reporting Autopsy Histology using SOP NEURO GEN 049</p> <p>Protocol for Handling and Reporting Epilepsy Surgery Specimens using SOP NEURO GEN 059</p> <p>Decalcification</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Tissue samples</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>H&E staining for tissue architecture and nuclear detail (Identification of basophilic and eosinophilic structures)</p> <p>Special staining (manual) for the identification of:</p> <p>Mucins</p> <p>Mucins</p> <p>Neurofibrillary tangles</p> <p>Amyloid</p> <p>Nissl substance</p> <p>Elastic fibres</p> <p>Gram +ve and -ve organisms</p> <p>Fungi</p> <p>Collagen</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Tissue processing: Thermo-Shandon Excelsior Tissue Processor (NEURO GEN 057)</p> <p>Embedding Leica EG1150H Embedding Centre (NEURO GEN 035)</p> <p>Microtomy Leica RM2235 rotary microtome Leica 1400 sledge microtome</p> <p>Haematoxylin and Eosin staining SOP NEURO GEN 088 using a Gemini Staining Machine</p> <p>Manual staining using the following SOPs</p> <p>Alcian Blue using SOP NEURO STAIN 001</p> <p>Alcian Blue - Periodic Acid Schiff using SOP NEURO STAIN 002</p> <p>Bielschowsky's Silver Stain using SOP NEURO STAIN 003</p> <p>Congo Red using SOP NEURO STAIN 004</p> <p>Cresyl Fast Violet using SOP NEURO STAIN 005</p> <p>Elastic Van Gieson (Miller's) using SOP NEURO STAIN 008</p> <p>Gram-Twort using SOP NEURO STAIN 012</p> <p>Grocott (hexamine silver method) using SOP NEURO STAIN 013</p> <p>Haematoxylin Van Gieson using SOP NEURO STAIN 0016</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Special staining (manual) for the identification of (cont'd):</p> <p>Myelin sheaths (CNS)</p> <p>Melanin</p> <p>Carbohydrates</p> <p>Mucins, fungi and carbohydrates</p> <p>Ferric iron</p> <p>Reticulin fibres</p> <p>Myelin sheaths (PNS)</p> <p>Mineralised bone and calcium deposits</p> <p>Leprosy bacilli</p> <p>TB bacilli</p> <p>Immunochemistry for the identification of:</p> <p>Prion protein</p> <p>Amyloid plaques</p> <p>Adrenocorticotrophic hormone</p> <p>Smooth muscle cells</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Luxol Fast Blue/Cresyl Fast Violet (LFB/Nissl) using SOP NEURO STAIN 019</p> <p>Masson-Fontana using SOP NEURO STAIN 020</p> <p>PAS Diastase using SOP NEURO STAIN 007</p> <p>Periodic-Acid Schiff Technique (PAS) using SOP NEURO STAIN 022</p> <p>Perls' Prussian Blue using SOP NEURO STAIN 023</p> <p>Reticulin (Gordon & Sweet's) using SOP NEURO STAIN 024</p> <p>Solochrome Cyanine using SOP NEURO STAIN 030</p> <p>Von Kossa SOP NEURO STAIN 025</p> <p>Wade-Fite SOP NEURO STAIN 027</p> <p>Ziehl Neelsen (Cold Method) SOP NEURO STAIN 028</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>12F10</p> <p>A4 (β-A4)</p> <p>ACTH</p> <p>Actin (SMA)</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Alpha fetoprotein</p> <p>32KDa human inhibin</p> <p>Apolipoprotein J – nerve fibre injury</p> <p>Amyloid precursor protein – nerve fibre injury</p> <p>Cell membrane protein found in brain</p> <p>Loss of expression is associated with astrocytomas</p> <p>Embryonic tumours</p> <p>Used to aid classification of lymphomas</p> <p>Used to aid classification of lymphomas</p> <p>Used to aid sub-typing of medulloblastomas</p> <p>Neuroanatomical marker</p> <p>Neuroanatomical marker</p> <p>Used to aid classification of lymphomas and renal cell carcinomas</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>AFP</p> <p>Alpha Inhibin</p> <p>ApoJ</p> <p>APP</p> <p>Aquaporin 4</p> <p>ATRX</p> <p>BAF47</p> <p>BCL2</p> <p>BCL6</p> <p>Beta-Catenin</p> <p>Calbindin (CB)</p> <p>Calretinin</p> <p>CD10</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Used to aid classification of B-cell lymphomas</p> <p>Demonstration of Reed-Sternberg and other cell types</p> <p>Used to aid classification of lymphomas</p> <p>Antigen on B lymphocytes</p> <p>Used to aid classification of lymphomas</p> <p>Antigen on T lymphocytes</p> <p>Reed-Sternberg cells</p> <p>Endothelial cells</p> <p>T-cell subset</p> <p>Lymphocytes</p> <p>Used to aid classification of lymphomas</p> <p>Nerve and neuroendocrine cells</p> <p>Macrophages and mononuclear cells</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>CD138</p> <p>CD15</p> <p>CD1a</p> <p>CD20 (L26)</p> <p>CD23</p> <p>CD3</p> <p>CD30</p> <p>CD34</p> <p>CD4</p> <p>CD45</p> <p>CD5</p> <p>CD56</p> <p>CD68</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 **Issue date:** 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Used to aid classification of B-cell lymphomas</p> <p>T-cell subset</p> <p>Ewing's Sarcoma marker</p> <p>Antigen in intestinal epithelium</p> <p>Protein in gastro-intestinal cells</p> <p>Granules in neuroendocrine cells</p> <p>Pan-cytokeratin marker</p> <p>Cytokeratin in specific epithelium</p> <p>Cytokeratin in gastro-intestinal cells</p> <p>Cytokeratin in epithelium</p> <p>Cytomegalovirus</p> <p>Used to aid classification of lymphomas</p> <p>Smooth and striated muscle cells</p> <p>Epstein-Barr virus</p> <p>Protein in epithelial cells</p> <p>Follicle Stimulating Hormone</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>CD79a</p> <p>CD8</p> <p>CD99</p> <p>CDX2</p> <p>CEA</p> <p>Chromogranin A</p> <p>CK(Pan)</p> <p>CK07</p> <p>CK20</p> <p>CK5/6</p> <p>CMV</p> <p>Cyclin D1</p> <p>Desmin</p> <p>EBV</p> <p>EMA</p> <p>FSH</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 **Issue date:** 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Used to aid identification of rare Dementias</p> <p>Used in classification of Medulloblastomas</p> <p>Glycoprotein in specific epithelium</p> <p>Glial Fibrillary Acidic Protein</p> <p>Growth Hormone</p> <p>Tri-Methyl-Histone H3</p> <p>Human Chorionic Gonadotrophin</p> <p>Used to aid identification of gliomas</p> <p>HLA Class II DR Antigen</p> <p>Used to aid identification of melanomas</p> <p>Herpes Simplex Virus, Type 1</p> <p>Herpes Simplex Virus, Type 2</p> <p>Neuronal cell marker</p> <p>Used to aid identification of gliomas</p> <p>Kappa light chain – used to identify tumour monoclonality</p> <p>Nuclear protein in proliferating cells</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>FUS</p> <p>GAB1</p> <p>GCDFP15</p> <p>GFAP</p> <p>GH</p> <p>H3K27me3</p> <p>HCG</p> <p>Histone3</p> <p>HLA-DR</p> <p>HMB45</p> <p>HSV1</p> <p>HSV2</p> <p>HuC/D</p> <p>IDH1</p> <p>Kappa</p> <p>Ki67</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Lambda light chain – used to identify tumour monoclonality</p> <p>Ependymoma marker</p> <p>Leutinzing Hormone</p> <p>Microtubule Associated Protein – neuronal cell marker</p> <p>Measles virus</p> <p>Used as an aid in tumour identification</p> <p>Cytokeratin expressed in a range of epithelial cells</p> <p>Mismatch repair protein</p> <p>Used to aid classification of lymphomas</p> <p>Skeletal muscle</p> <p>Sub-typing muscle fibres</p> <p>Sub-typing muscle fibres</p> <p>Neuronal cell marker</p> <p>Neuronal cell marker</p> <p>Nerve fibres</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>Lambda</p> <p>L1CAM</p> <p>LH</p> <p>MAP2</p> <p>Measles</p> <p>MGMT</p> <p>MNF116</p> <p>MSH2</p> <p>MUM1</p> <p>Myogenin</p> <p>Myosin (Fast)</p> <p>Myosin (Slow)</p> <p>Nestin</p> <p>NeuN</p> <p>NF(Pan)</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 **Issue date:** 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY TISSUE AND FLUIDS (cont'd) Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Nerve fibres</p> <p>Neuronal cell marker</p> <p>Human Immunodeficiency Virus</p> <p>Cell proliferation marker</p> <p>Used to aid classification of Dementias</p> <p>Used as a marker in Pituitary tumours</p> <p>Neuronal cell marker</p> <p>Endogenous level of total Pd-I1</p> <p>Demonstration of small nerve fibres in skin biopsies</p> <p>Progesterone receptor expression in tumours</p> <p>Enzyme produced by trophoblasts</p> <p>Demonstration of Pneumocystis organism</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>NF200KD</p> <p>NSE</p> <p>P24</p> <p>P53</p> <p>P62</p> <p>Pan-α</p> <p>Parvalbumin</p> <p>PD-L1</p> <p>PGP9.5</p> <p>PGR</p> <p>PLAP</p> <p>Pneumocystis</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Used to aid classification of Dementias</p> <p>Prolactin hormone</p> <p>Used to aid classification of metastatic carcinomas</p> <p>Expressed in a range of cell types including glial cells</p> <p>Diagnostic marker for haemangiopericytomas</p> <p>SV40 virus</p> <p>Demonstration of synaptophysin producing cells</p> <p>Used to aid classification of Dementias</p> <p>Used to aid classification of Dementias</p> <p>Used to aid classification of Dementias</p> <p>Used to aid classification of Dementias</p> <p>Used to aid classification of Dementias</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>Polyglutamine</p> <p>Prolactin</p> <p>PSA</p> <p>S100</p> <p>Stat6</p> <p>SV40</p> <p>Synaptophysin</p> <p>Synuclein</p> <p>Tau (AT8)</p> <p>Tau3</p> <p>Tau4</p> <p>TDP43-P</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Formalin Fixed Paraffin Embedded Tissue (FFPE) sections on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Immunochemistry for the identification of (cont'd):</p> <p>Demonstration of Toxoplasma organism</p> <p>Thyroid stimulating hormone</p> <p>Nuclear protein in lung and thyroid</p> <p>Used to aid classification of Dementias</p> <p>Used in classification of Medulloblastomas</p> <p>Filament in mesenchymal cells</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunochemistry: Bond III automated method SOP Neuro GEN 067 immunohistochemistry. Using antibodies to:</p> <p>Toxoplasma</p> <p>TSH</p> <p>TTF1</p> <p>Ubiquitin</p> <p>YAP1</p> <p>Vimentin</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Stained slides prepared as above</p> <p>Brain biopsy</p> <p>Stained brain biopsy slides prepared as above</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p>Morphological assessment and interpretation/diagnosis</p> <p>H&E staining for tissue architecture and nuclear detail (Identification of basophilic and eosinophilic structures)</p> <p>Morphological assessment and interpretation/diagnosis</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Microscopic examination: Assorted range of diagnostic bright-field microscopes</p> <p>Protocol for Handling and Reporting CNS Biopsy Specimens (except Epilepsy Surgery) using SOP NEURO GEN 046</p> <p>Protocol for Handling and Reporting Pituitary Biopsies using SOP NEURO GEN 047</p> <p>Protocol for Reporting Autopsy Histology using SOP NEURO GEN 049</p> <p>Protocol for Handling and Reporting Epilepsy Surgery Specimens using SOP NEURO GEN 059</p> <p>Preparation of Smears and Frozen Sections for Intra-operative Diagnosis Howarth Class I Safety Cabinet Bright BM Cryostat</p> <p>Staining smears and frozen sections for intra-operative diagnosis (NEURO STAIN 025) Haematoxylin and Eosin</p> <p>Protocol for intra-operative smears and frozen sections (NEURO GEN 048)</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Muscle biopsy</p> <p>Muscle fresh/frozen on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Muscle Histochemistry for the identification of:</u></p> <p>Lysosomal acid phosphatase</p> <p>Cytochrome oxidase</p> <p>Muscle architecture</p> <p>Amyloid deposits</p> <p>Myoadenylate deaminase</p> <p>Myophosphorylase</p> <p>NADH-Tetrazolium reductase</p> <p>Non-specific esterase</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Preparation of Frozen Sections</p> <p>Howarth Class I Safety Cabinet Bright BM Cryostat</p> <p>Preparation of muscle biopsies using the following Laboratory Protocol for Handling Muscle Biopsies, SOP NEURO MUSCLE 008</p> <p>Manual staining using the following SOPs</p> <p>Acid Phosphatase, Lysosomal (substituted naphthol method) using SOP NEURO MUSCLE 003</p> <p>Cytochrome Oxidase using SOP NEURO MUSCLE 005</p> <p>Gomori's Trichrome using SOP NEURO MUSCLE 006</p> <p>Modified Congo Red for Inclusion Body Myositis using SOP NEURO MUSCLE 009</p> <p>Myoadenylate Deaminase using SOP NEURO MUSCLE 011</p> <p>Myophosphorylase using SOP NEURO MUSCLE 012</p> <p>NADH-Tetrazolium Reductase (DPNH Diaphorase) using SOP NEURO MUSCLE 013</p> <p>Non Specific Esterase ("Acid Esterase") using SOP NEURO MUSCLE 014</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Muscle fresh, frozen on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Muscle Immunochemistry for the identification of:</u></p> <p>Phosphofructokinase</p> <p>Succinate dehydrogenase</p> <p>Lipids</p> <p>Lipids</p> <p>Glycogen and muscle basement membrane</p> <p>Muscle architecture</p> <p>Muscle architecture</p> <p>Combined demonstration of cytochrome oxidase and succinic dehydrogenase</p> <p>Muscular dystrophies</p> <p>Muscular dystrophies</p> <p>Muscular dystrophies</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunocytochemistry - Manual (Vectastain Universal Elite ABC Kit) using SOP NEURO STAIN 017 Muscle Immunocytochemistry using SOP NEURO MUSCLE 010</p> <p>Phosphofructokinase using SOP NEURO MUSCLE 001</p> <p>Succinate Dehydrogenase using SOP NEURO MUSCLE 017</p> <p>Sudan Black B using SOP NEURO MUSCLE 018</p> <p>Oil Red O SOP NEURO MUSCLE 027</p> <p>PAS/Diastase-PAS/Celoidin-PAS (for muscle only) using SOP NEURO MUSCLE 015</p> <p>Verhoeff's Haematoxylin - Van Gieson (For Muscle Only) using SOP NEURO MUSCLE 020</p> <p>Haematoxylin & Eosin (Harris') for Muscle Biopsies using SOP NEURO MUSCLE 022</p> <p>Combined Cytochrome Oxidase-Succinate Dehydrogenase (COX-SDH Method) using SOP NEURO MUSCLE 023</p> <p>Dys1</p> <p>Dys2</p> <p>Dys3</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Muscle fresh, frozen on glass slides</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Muscle Immunochemistry for the identification of:</u></p> <p>Sarcoglycanopathies</p> <p>Sarcoglycanopathies</p> <p>Sarcoglycanopathies</p> <p>Sarcoglycanopathies</p> <p>Congenital muscular dystrophies</p> <p>Congenital muscular dystrophies</p> <p>Congenital muscular dystrophies</p> <p>Congenital muscular dystrophies</p> <p>Congenital muscular dystrophies</p> <p>Rare muscle diseases</p> <p>Rare muscle diseases</p> <p>Limb-girdle muscular dystrophy</p> <p>Limb-girdle muscular dystrophy</p> <p>Limb-girdle muscular dystrophy</p> <p>Inflammatory myopathies</p> <p>Inflammatory myopathies</p> <p>Inflammatory myopathies</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunocytochemistry - Manual (Vectastain Universal Elite ABC Kit) using SOP NEURO STAIN 017 Muscle Immunocytochemistry using SOP NEURO MUSCLE 010</p> <p>Sarc (alpha)</p> <p>Sarc (beta)</p> <p>Sarc (gamma)</p> <p>Sarc (delta)</p> <p>Laminin Alpha-5</p> <p>Laminin Alpha-2 (80KD)</p> <p>Laminin Alpha-2 (300KD)</p> <p>Laminin Beta-1</p> <p>Laminin Gamma-1</p> <p>Emerin</p> <p>Lamin A/C</p> <p>Dysferlin 1</p> <p>Dysferlin 2</p> <p>Caveolin 3</p> <p>Utrophin</p> <p>HLA-ABC</p> <p>Myosin (neonatal)</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Muscle fresh, frozen on glass slides</p> <p>Stained muscle biopsy slides prepared as above</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Muscle Immunocytochemistry for the identification of:</u></p> <p>Inflammatory myopathies</p> <p>Rare muscle diseases</p> <p>Rare muscle diseases</p> <p>Rare muscle diseases</p> <p>Myofibrillary myopathies</p> <p>Cytoskeletal protein</p> <p>Sub-typing muscle fibres</p> <p>Sub-typing muscle fibres</p> <p>Morphological assessment and interpretation/diagnosis</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Immunocytochemistry - Manual (Vectastain Universal Elite ABC Kit) using SOP NEURO STAIN 017 Muscle Immunocytochemistry using SOP NEURO MUSCLE 010</p> <p>C5b-9</p> <p>Collagen VI (3C4)</p> <p>Collagen VI (V126)</p> <p>Perlecan (A7L6)</p> <p>Myotilin</p> <p>Spectrin</p> <p>Myosin (fast)</p> <p>Myosin (slow)</p> <p>Preparation of muscle biopsies using the following Laboratory Protocol for Handling Muscle Biopsies, SOP NEURO MUSCLE 008</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Cerebrospinal fluid, Cyst fluid and Aspirates</p> <p>H&E stained cytopathology slides</p> <p>Skin biopsies</p> <p>Stained skin biopsy slides prepared as above</p>	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Cytopathology</u></p> <p>H&E staining for cellular architecture and nuclear detail (Identification of basophilic and eosinophilic structures)</p> <p>Morphological assessment and interpretation/diagnosis</p> <p><u>Intra-epidermal Nerve Fibre Density analysis</u></p> <p>Demonstration of intra-epidermal nerve fibres</p> <p>Morphological assessment and interpretation/diagnosis</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Cytospin Preparations of Cerebrospinal fluid, Cyst fluid and Aspirates. Using SOP NEURO GEN 032</p> <p>Haematoxylin and Eosin staining SOP NEURO GEN 088 using a Gemini Staining Machine</p> <p>Protocol for Handling and Reporting CNS Biopsy Specimens (except Epilepsy Surgery) using SOP NEURO GEN 046</p> <p>Laboratory Protocol for Handling Skin Biopsies (Small-Fibre Neuropathies) using SOP NEURO GEN 040</p> <p>Laboratory Protocol for handling nerve Biopsies using SOP NEURO GEN 039</p> <p>Staining: PGP9.5 using the ABC Immunocytochemistry – Manual (NEURO STAIN 017) protocol</p> <p>Small Nerve Fibre Neuropathy - Counting and Reporting using SOP NEURO GEN 053</p>



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust

Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY TISSUE AND FLUIDS (cont'd)	<u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u>	Macroscopic and Microscopic examination:
Formalin fixed paraffin embedded tissue (FFPE) sections on glass slides- CNS Tumours	<u>Fluorescence in situ hybridisation</u>	Documented in house methods incorporating manufacturers' instructions where relevant:
	1p/1q	Dako hybridiser Olympus BX51 Fluorescence microscope Neuro Gen 092 Fluorescence microscopy for FISH including cytovision image capture SOP Neuro stain 010, 031 Neuro Gen 064, 065 and 085
	19p/19q	FISH probes 1p/1q Dual colour probe set Neuro stain 009
	C-Myc/CEP 8	19p/19q
	EGFR/CEP 7	C-Myc/CEP8
	<u>Molecular tests</u>	EGFR/CEP7
	MGMT Methylation	Qubit Fluorometer Veriti 96 W Thermal cycler Qiagen Pyromark Q24 (XDOC 90) SOP NEURO MBIOL 1,2,4,5,7,8,9,10,11,12,13,16 and 17
	IDH Mutations	
	BRAF V600 Mutations	
	Histone H3.3 mutation	Neuro MBIOL 022 (Pyrosequencing custom assays) Neuro MBIOL 023 (Reporting pyrosequencing results)
		RNA extraction using Veriti 96 W Thermal cycler



8620
Accredited to
ISO 15189:2012

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

King's College Hospital NHS Foundation Trust
Issue No: 004 Issue date: 25 April 2019

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY TISSUE AND FLUIDS (cont'd)	<p><u>Neuropathology examination activities in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis (cont'd)</u></p> <p><u>Molecular tests</u></p> <p>KIAA1549-BRAF Fusion</p>	<p>Macroscopic and Microscopic examination:</p> <p>Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p>Gel electrophoresis using electrophoresis tank Gel Doc EZ Imager SOP NEURO MBIOL 6,14,15,18</p>
END		