Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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



8680

Accredited to ISO 15189:2012

Royal National Orthopaedic Hospital NHS Trust

Issue No: 006 Issue date: 26 February 2025

Royal National Orthopaedic Hospital NHS Trust **Brockley Hill** Stanmore Middlesex HA7 4LP

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Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY TISSUE	Histological examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Fixed and fresh tissue; biopsies, excisional and surgical resection	Examination of tissues to identify or exclude morphological abnormalities for the purposes of clinical diagnosis.	Specimen Dissection
Biopsy / open biopsy Resections Curettage		SOPTRI1 – Trimming Room Procedures
Amputation		SOPSCU1 – Surgical Cut-up
Fixed tissue		SOPL46 – EXakt saw Decalcification of bone SOPL16-decalcification SOPL5-faxitron Pathvision Tissue Processing Leica Histocore Pegasus Plus tissue processors SOPL54



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HUMAN BODY TISSUE	Histological examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin Fixed tissue		Tissue Embedding SOPL14 – embedding procedures Myr EC 500 embedding machine and cold plate
Formalin fixed paraffin embedded tissue		<u>Microtomy</u> SOPL15 – Microtomy Leica RM2245 microtomes
Formalin fixed paraffin embedded tissue	Identification of basophilic and eosinophilic structures	<u>Haematoxylin and Eosin stain</u> Automated SOPL20 – Leica Histocore Spectra ST & CT
	Special Stains to detect the following	<u>Special staining</u> MP3 – Manual Staining
Imprints – fixed	Osteosarcoma	Alkaline phosphatase
Formalin-fixed paraffin embedded tissue	PAS +ve substances	Periodic acid Schiff (PAS) reaction
	Mycobacterium tuberculosis (TB)	Ziehl Neelsen
	Amyloid	Congo Red (Highman's)
		Automated SOPL10 –Immunohistochemistry SOPL 31 Leica Bond III
	Epithelial cells	AE1/AE3
	Inflammary myofibroblastic	ALK
	Scattered T cells in germinal centres and mantle zone B cells	BCI2



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HUMAN BODY TISSUE	Histological examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin-fixed paraffin-embedded	Immunohistochemistry to detect the	Immunohistochemistry
tissue	following	Automated SOPL10 –Immunohistochemistry SOPL 31 Leica Bond III
	Chordoma	Brachyury
	Smooth muscle cells	Caldesmon
	Myoepithelial cells	Calponin Cyclin D1
	Dendritic cells and thymocytes	CD1a
	T cells	CD3
	All germinal centre cells	CD10
	Germinal mantle zone B lymphocytes	CD20
	Mature B cells and follicular dendritic cells	CD21
		CD23
	Activated lymphocytes and plasma cells. RS cells in hodgkins lymphoma	CD30
	Endothelial cells, activated B and T lymphocytes	CD31
	Endothelial cells	CD34
	All leucocytes	CD45
	Macrophages	CD68
	MIC2 gene products	CD99
	Mast cell and GIST	CD117
	Plasma cells	CD138



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Formalin-fixed paraffin-embedded tissue	Immunohistochemistry to detect the following	Immunohistochemistry
	Neuroendocrine	Chromogranin A
	Glandular and transitional epithelia	Cytokeratin 20
	Gastrointestinal epithelia	Cytokeratin 20
	Smooth and striated muscle cells	Desmin
	GIST	DOG1
	Epithelial membrane	EMA
	Oestrogen receptor	ER
	T cells, macrophages	ERG
	Glial fibrillary acidic protein	GFAP
	Melanoma cells	HMB45
	Chondroblastoma cells	H3-K36M
		H3K27me3
	Absence of expression on epitheliod sarcoma cells	INI/BAF47
	Proliferating cells in germinal centre B cells	Ki67
	Melanocytes	Melan A
	Cytokeratins	MNF116
	Low grade myxoid fibrosarcoma	MUC-4
	Rhadomyosarcoma	Myogenin MYOD1



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Formalin-fixed paraffin-embedded tissue	Immunohistochemistry to detect the following	Immunohistochemistry
	Progesterone receptor	PR
	Squamous epithelium	P63
	Prostate	PSA Pan-TRK
	Schwannoma, malignant melanoma	S100
	Leiomyosarcoma	SMA
	Solitary fibrous tumour	STAT-6
	Neuroendocrine	Synaptophysin SMARCA4 SOX-10
	Acute lymphoblastic lymphoma	TdT
	Thyroid transcription factor-1	TTF1
	Epithelioid haemangioendothelioma (EHE)	CAMTA1
	Pseudo myogenic haemangioendothelioma	FOSB
	Histone H3.3G34W mutant cells	H3.3G34W
	Alveolar soft part sarcoma (ASPS), renal cell carcinoma, PEComas and Epithelioid haemangioendothelioma (EHE)	TFE3
	Epithelioid haemangiomas, osteoblastoma and osteoid osteoma	FOS



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Formalin-fixed paraffin-embedded tissue	Morphological assessment and interpretation/diagnosis	Interpretive Microscopy SOPSCU7 –microscopic reporting of cases
HUMAN BODY TISSUE	Molecular examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin-fixed paraffin-embedded tissue	Detection of specific gene rearrangements in solid tumours	Molecular Biology - Fluorescence in situ hybridisation (interphase FISH) SOPM1 – interphase FISH SOPM2 – Molecular Pathology Laboratory org. SOPM5- Using the fluorescent microscope. Olympus BX61 SOPM6 – Preparing samples or molecular genetic studies
	Alveolar Rhabdomyosarcoma: FOXO1 gene rearrangement using break-apart probes. PAX3/FOXO1 gene rearrangement using fusion probes PAX7/FOXO1 gene rearrangement using fusion probes	
	Aneurysmal bone cyst / Nodular Fasciitis: <i>USP6</i> gene rearrangement using break-apart probes.	



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	Angiomatoid fibrous histiocytoma, Clear cell sarcoma, Desmoplastic small round cell tumour, Extraskeletal myxoid chondrosarcoma and PNET/ Ewing's sarcoma: <i>EWSR1</i> gene rearrangement using break-apart probes. Atypical lipomatous tumour / well-differentiated liposarcoma, Dedifferentiated liposarcoma, Parosteal osteosarcoma <i>MDM2</i> gene amplification analysis	



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Formalin-fixed paraffin-embedded tissue	Detection of specific gene rearrangements in solid tumours	Molecular Biology - Fluorescence in situ hybridisation (interphase FISH) SOPM1 – interphase FISH SOPM2 – Molecular Pathology Laboratory org. SOPM5- Using the fluorescent microscope. Olympus BX61 SOPM6 – Preparing samples or molecular genetic studies
	Desmoplastic small round cell tumour: <i>WT1</i> gene rearrangement using break-apart probes.	
	Extraskeletal myxoid chondrosarcoma: NR4A3gene rearrangement using break-apart probes	
	Low-grade fibromyxoid sarcoma and Myxoid liposarcoma: FUS gene rearrangement using break apart probes	
	Myxoid liposarcoma: <i>DDIT3</i> gene rearrangement using break-apart probes	
	Radiation-induced Angiosarcoma: c-MYC gene amplification analysis	
	Synvovial sarcoma: SS18 gene rearrangement using break-apart probes	
	Round cell carcinomas:	
	CIC gene rearrangement using break apart probes	



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HUMAN BODY TISSUE	Molecular examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin-fixed paraffin-embedded tissue	Detection of specific gene rearrangements in solid tumours	Molecular Biology - Fluorescence in situ hybridisation (interphase FISH) SOPM1 – interphase FISH SOPM2 – Molecular Pathology Laboratory org. SOPM5- Using the fluorescent microscope. Olympus BX61 SOPM6 – Preparing samples or molecular genetic studies
	Dermatofibrosarcoma protuberans:	
	COL1A1-PDGFB rearrangement using break apart probes	
	Alveolar Rhabdomyosarcoma: <i>PAX3-FOXO1</i> gene rearrangement and <i>PAX7-FOXO1</i> using fusion probes	
		<u>Nucleic Acid Extraction</u> manual method using in house procedures SOPM3-
	Detection of specific fusion transcripts in solid tumours	<u>Reverse Transcription-PCR RT-</u> <u>PCR</u> SOPM4 –PCR
		SOPM6 – Preparing samples or molecular genetic studies.
	Alveolar Rhabdomyosarcoma: PAX3/FOXO1 PAX7/FOXO1	
	Angiomatoid fibrous histiocytoma EWSR1/CREB1 EWSR1/ATF1	



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HUMAN BODY TISSUE	Molecular examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
		Nucleic Acid Extraction manual method using in house procedures SOPM3-
	Detection of specific fusion transcripts in solid tumours	<u>Reverse Transcription-PCR RT-</u> <u>PCR</u> SOPM4 –PCR
		SOPM6 – Preparing samples or molecular genetic studies.
	Alveolar soft part sarcoma ASPSCR1/TFE3	
	Clear cell sarcoma, EWSR1/ATF1 EWSR1/CREB1	
	Desmoplastic small round cell tumour: EWSR1/WT1	
	Extraskeletal myxoid chondrosarcoma: EWSR1/NR4A3 TAF15/NR4A3	
	Low-grade fibromyxoid sarcoma: FUS/CREB3L2	



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HUMAN BODY TISSUE	Molecular examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin-fixed paraffin-embedded tissue	Detection of specific fusion transcripts in solid tumours	Reverse Transcription-PCR RT- PCR SOPM4 –PCR Epperdorf Nexus SOPM6 – Preparing samples or molecular genetic studies.
	Mesenchymal chondrosarcoma: HEY1/NCOA2	
	Myxoid liposarcoma: FUS/DDIT3	
	Nodular Fasciitis: MYH9/USP6	
	PNET/ Ewing's sarcoma: EWSR1/FLI1 EWSR1/ERG	
	Synvovial sarcoma: SS18/SSX1 SS18/SSX2	
	Small round cell sarcomas: BCOR/CCNB3	
	Epithelioid haemangioendothelioma: WWTR1/CAMTA1	



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HUMAN BODY TISSUE	Molecular examinations for the purpose of clinical diagnosis	In-house documented procedures based on equipment manuals as relevant
Formalin-fixed paraffin-embedded tissue	Detection of specific point mutations in solid tumours for detection of specific fusion transcripts in solid tumours	PCR and Restriction enzyme digestion PCR SOPM4 –PCR Techne TC4000 SOPM6 – Preparing samples or molecular genetic studies.
	Desmoid-type fibromatosis: CTNNB1 mutation analysis – exon3- p.T41A, p.S45P and p.S34F substitutions	
	Fibrous dysplasia / intramuscular myxoma: GNAS1 mutation analysis p.R201H p.R201C and p.Q227L	
END		