

MolPath_Assays_2015.xls

Analysis	Method	Service Providers												
		Zürich	Basel	Bern	Genève	Lausanne	St.Gallen	Liestal	Aarau	Sion	Locarno	Luzern	Baden	Triemli
Lymphomas / Leukemias														
B-/T-Cell Clonality Assessment														
Immunoglobulin light chain restriction (Kappa/Lambda)	ISH	x						x	x			x		
Immunoglobulin gene rearrangement (IgH)	Southern blot	x			x									
T-cell receptor gene rearrangement (TcRβ)	Southern blot	x			x									
Immunoglobulin gene rearrangement (IgH)	PCR / Frag. analysis	x	x	x	x	x	x		x	x	x	x		
T-cell receptor gene rearrangement (TcRγ)	PCR / Frag. analysis	x	x	x	x	x	x		x	x	x	x		
T-cell receptor gene rearrangement (TcRβ)	PCR / Frag. analysis				x					x		x		
Immunoglobulin gene (IgH) analysis of mutation-status	PCR / Sequencing	x					x							
Translocations														
t(14;18); follicular lymphoma	PCR / LD-PCR	x	x		x	x	(x)							
t(14;18); follicular lymphoma	FISH	x	x	x	x	x	x		x	x	x	x	x	
t(11;14); mantle cell lymphoma	PCR	x	x		x	x	(x)							
t(11;14); mantle cell lymphoma	FISH	x	x	x	x	x	x		x	x	x	x	x	
t(11;?) CCND1 (break-apart)	FISH		x	x			x					x		
t(8;14); Burkitt lymphoma	FISH	x	x		x	x	x		x	x	x	x		
t(8;?) MYC (break-apart); Burkitt lymphoma	FISH	x	x	x			x		x	x	x	x	x	
t(14;?) IGH (break-apart)	FISH	x	x				x					x		
t(18;?) BCL2 (break-apart)	FISH		x	x			x					x		
t(3;?) BCL6 (break-apart)	FISH		x	x			x					x		
t(11;18) MALT lymphoma	RT-PCR	x							x					
t(11;18) / MALT1 t(18;break-apart); MALT lymphoma	FISH	x	x	x	x	x	x		x	x	x	x	x	
t(4;14) FGFR3; multiple myeloma	FISH	x												
t(14;16) MAF; multiple myeloma	FISH	x												
t(2;?) ALK (break-apart) anaplastic large cell lymphoma	FISH	x	x	x								x		
t(15;17) PML-RARA, promyelocytic leukemia	FISH	x		x										
FIP1L1-PDGFRa fusion, eosinophilic leukaemia	PCR / Sequencing		x											
Deletions														
Del (11q22) ATM; CLL	FISH	x												
Del (13q14.3); CLL	FISH	x												
Del (13q34); CLL	FISH	x												
Del (13q14.1-3) RB1; MDS, plasma cell myeloma	FISH	x												
Mutation analysis														
JAK2 (Exons 12 and 14); chron. myeloprolif. disease	PCR / Sequencing	x										x		
JAK2 V617F mutation (Exon 12); chron. myeloprolif. disease	PCR / RFLP		x	x										
CALR (Exon 9); myeloprolif. disease	PCR / Sequencing	x												
CEBPA (Exon 1); acute myeloid leukemia	PCR / Sequencing	x												
KIT (Exons 8, 11, 17); acute myeloid leukemia (CEF-AML)	PCR / Sequencing	x												
KIT (Exons 9, 11, 13, 14, 17); mastocytosis	PCR / Sequencing	x	x	x							x	x		
KIT D816V; mastocytosis	PCR / RFLP		x	x							x			
MYD88 (Exon 5); lymphoplasmacytic lymphomas	PCR / Sequencing/AS-PCR	x												
CXCR4 (Exon 2, C-terminale Domäne); lymphoplasmacytic lymphomas	PCR / Sequencing	x												
MAP2K1 (exons 2, 3, 6); histiocytosis	PCR / Sequencing	x												
SF3B1 (exons 14, 15); myelodysplastic syndrome	PCR / Sequencing	x												
SRSF2 (exon 1); myelodysplastic syndrome	PCR / Sequencing	x												
STAT3 (exon 21); lymphomas	PCR / Sequencing	x												
U2AF1 (exons 2, 6); myelodysplastic syndrome	PCR / Sequencing	x												
Soft tissue tumors														
Translocations														
t(11;22) EWS-FLI and t(21;22) EWS-ERG Ewing sarcoma	RT-PCR	x	x				x							
t(X;18) synovial sarcoma	RT-PCR	x					x							
t(12;16) und t(12;22) myxoid liposarcoma	RT-PCR	x					x							
t(11;22) WT1 desmoplastic small round cell tumor	RT-PCR	x					x							
t(1;13) PAX7 and t(2;13) PAX3 alveolar rhabdomyosarcoma	RT-PCR	x					x							
t(7;16) & t(11;16) low-grade fibromyxoid sarcoma	RT-PCR	x					x							
t(9;17) & t(9;22) myoid chondrosarcoma	RT-PCR						x							
t(12;22) ATF1; clear cell sarcoma	RT-PCR	x					x							
FKHR (break-apart) alveolar rhabdomyosarcoma	FISH	x	x	x					x		x			
t(1;13) FKHR-PAX3; t(2;13) FKHR-PAX7 alv. rhabdomyosarcoma	FISH (dual-fusion)	x										x		

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EWSR1 (break-apart); Ewing sarcoma	FISH	x	x	x		x	x		x		x		x	
SYT (break-apart) synovial sarcoma	FISH	x	x	x			x		x		x		x	
CHOP (break-apart) / FUS (break-apart) myxoid liposarcoma	FISH	x	x	x			x		x		x		x	
MDM2 amplification	FISH	x	x	x			x				x		x	
CDK4 amplification	FISH		x								x		x	
Del (13q14.1-3) RB1; low grade liposarcoma	FISH	x												
Analysis	Method	Service Providers												
Other tumors		Zürich	Basel	Bern	Genève	Lausanne	St.Gallen	Liestal	Aarau	Sion	Locarno	Luzern	Baden	Triemli
Aneusomy / amplifications / deletions / allelic imbalance														
Her-2 amplification; mamma carcinoma	FISH (PathVysion)	x	x	x	x	x	x	x	x	x	x	x	x	x
Topoisomerase 2a amplification; breast carcinoma	FISH	x	x				x				x	x		
PTEN / CEP10 (10q23 / 10p11.1-q11.1)	FISH	x	x				x				x			x
EGFR amplification	FISH	x	x	x			x				x	x		
MYCN amplification; neuroblastoma	FISH		x	x					x					
Deletion 9p21; mesothelioma	FISH	x	x				x					x		
Aneusomy 3, 7, 17, 9p21; bladder cancer	FISH (Urovysion)	x	x	(x)	x		x		x		x	x	x	
Aneusomy 6, 5p15, 7p12, 8q24; lung cancer	FISH (LAVysion)		x								x		(x)	
Aneusomy 6, 11; melanoma	FISH											x		
LOH; p53 / CEP 17	FISH	x		x			x							
LOH 9/8p/13q/16q/17p; urothelial carcinoma (10 microsatellites)	PCR / Frag. analysis	x							x					
BRAF-KIAA1549 fusion; pilocytic astrocytoma	RT-PCR / Sequencing	x												
LOH 1p/19q; glioma (6-7 microsatellites)	PCR / Frag. analysis	x		x		x			x					
LOH 1p/19q; glioma	FISH		x				x		x		x	x		
LOH Chromosome 18q; colorectal cancer (9 microsatellites)	PCR / Frag. analysis										x			
Microsatellite-instability (5-7 microsatellites); colorectal cancer	PCR / Frag. analysis	x	x	x		x	x	x			x	x		
hMLH1 methylation analysis	PCR / bisulfite SSP		x			x								
MGMT promoter methylation analysis, glioma	PCR / bisulfite / FA	x	x	x							x			
Translocations														
t(2;?) ALK (break-apart) lung cancer	FISH	x	x	x								x		
t(X;?) (p11;?) TFE3 renal cell carcinoma	FISH	x												
Mutation analysis														
AKT1 (exon 4)	PCR / Sequencing	x		x										
BRAF (exons 11 and 15)	PCR / Sequencing	x	x	x		x	x			x	x	x	x	x
CEBPA (exon 1)	PCR / Sequencing	x												
CTNNB1 (exon 3); liver carcinoma, fibromatosis	PCR / Sequencing	x	x											
EGFR (exons 18 - 21)	PCR / Sequencing	x	x	x	x	x	x				x	x	x	
EGFRvIII (deletion exons 2-7)	PCR / Sequencing	x												
ERBB2 (HER2; exons 19 and 20)	PCR / Sequencing	x	x	x		x						x		
GNA11 (exon 5)	PCR / Sequencing	x												
GNAQ (exon 5)	PCR / Sequencing	x												
GNAS1 (exon 8; Codon 201); fibrous dysplasia	PCR / Sequencing	x	x											
HRAS (exons 2 and 3)	PCR / Sequencing	x												
IDH1 (exon 4); glioma	PCR / Sequencing	x	x	x										
IDH2 (exon 4); glioma	PCR / Sequencing	x	x	x										
KIT (exons 9, 11, 13, 14 and 17)	PCR / Sequencing	x	x	x		x					x	x		
KRAS (exons 2, 3 and 4)	PCR / Sequencing	x	x	x		x	x	x		x	x	x	x	x
MEK1/MAP2K1 (exon 2)	PCR / Sequencing			x										
MEN1 (exons 2 - 10); neuroendocrine tumors	PCR / DGGE / Seq	x												
NRAS (exons 2 and 3)	PCR / Sequencing	x	x				x				x			
PDGFRA (exons 10, 12 and 18)	PCR / Sequencing	x	x	x			x				x	x		
PIK3CA (exons 9 and 20)	PCR / Sequencing	x		x										
RET (exons 8, 10, 11, 13 - 16); neuroendocrine tumors	PCR / DGGE / Seq	x												
SDHB/SDHC/SDHD (all exons); neuroendocrine tumors	PCR / DGGE / Seq	x												
TP53 (p53; exons 5 - 8)	PCR / Sequencing		x				(x)				x	x		
VHL (exons 1, 2 and 3); renal carcinoma	PCR / Sequencing	x	x											
Analysis	Method	Service Providers												
Infectious diseases		Zürich	Basel	Bern	Genève	Lausanne	St.Gallen	Liestal	Aarau	Sion	Locarno	Luzern	Baden	Triemli
EBV/EBER)	ISH	x		x	x	x	x	x	x	x	x	x		x
EBV	PCR				x			x						
CMV	ISH			x	x		x		x					x
CMV	PCR							x						

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HPV, incl. typing	PCR / Seq; RFLP; hyb	x	x	x	x		x	x			x	x		
HPV: high risk + low risk	ISH						x	x		High-Risk				x
HPV: high risk + low risk	Hybrid capture						x							x
KSHV/HHV8	PCR	x			x			x				x		
KSHV/HHV8 Genotypisierung	PCR							x						
Hepatitis B und Hepatitis B pre-core mutant	PCR							x						
Hepatitis C	RT-PCR	x						x						
Hepatitis Delta	PCR							x						
Hepatitis E	RT-PCR	x												
HHV-1 & 2 Herpes simplex Virus	PCR							x						
Herpes simplex Virus	ISH						x							x
VZV Varizella Zoster Virus	PCR							x						
Parvovirus	PCR					x								
Bacteria (eubacterial PCR)	PCR							x						
Mycobacterium tuberculosis	PCR	x		x	x		x	x				x		
Mycobacterium leprae	PCR / Sequencing	x		x				x						
atypical mycobacteria incl. typing	PCR / Sequencing	x		x			x	x				x		
Yersinia enterocolitica/Pseudotuberculosis	PCR							x						
Helicobacter pylori	PCR							x						
Helicobacter heilmannii	PCR							x						
Helicobacter Genus	PCR							x						
Clarithromycin (Klacid)-resistance (Helicobacter pylori)	ISH							x						
Tropheryma whippelii	PCR							x						
Staphylococcus Species	PCR							x						
Borrelia	PCR							x						
Mucor Mycosis	PCR							x						
Bartonella henselae, quintana	PCR			x				x			x			
Treponema pallidum	PCR	x												
Aspergillus fumigatus, flavus	PCR							x						
Miscellaneous		Zürich	Basel	Bern	Genève	Lausanne	St.Gallen	Liestal	Aarau	Sion	Locarno	Luzern	Baden	Triemli
PRNP mutations; Creutzfeldt-Jakob Disease	PCR / Sequencing	x												
HFE mutations (Exons 2 and 4); Hemochromatosis	PCR / Sequencing	x												
CARD15/NOD2 mutations (G908R, L1007P, R702) M. Crohn	PCR / Sequencing			x										

webpages

Lausanne	www.chuv.ch/iup/iup_home/iup_diagnostic.htm
Zürich	www.klinische-pathologie.usz.ch/HealthProfessionals/LaborsundAngebote/Seiten/MolekulareDiagnostik.aspx
Basel	www.unispital-basel.ch/das-universitaetsspital/bereiche/medizinische-querschnittsfunktionen/kliniken-institute-abteilungen/pathologie/
Bern	www.pathology.unibe.ch
Genève	www.hug-ge.ch
St.Gallen	www.pathologie.kssg.ch
Liestal	www.pathologie-bl.ch
Aarau	www.ksa.ch/1443/2684/2702.asp
Sion	www.ichv.ch/
Locarno	www.ti.ch/DSS/DSP/IstCP/
Luzern	www.ksl.ch/standorte/luzern/kliniken/pathologie.html
Baden	www.kantonsspitalbaden.ch/Fachbereiche/Pathologie/
Triemli	www.stadt-zuerich.ch/triemli/de/index/kliniken_institute/pathologie.html