



Leistungsspektrum

Molekulare Mikrobiologie, Pathologie und Genetik

Mikrobiologie		Liquor	Abstrich	Rachen	Punktat	Gewebe	Paraffin	EDTA Blut	Serum	Sputum	BAL - TS	Urin	Stuhl	Kultur	Version 9.0 - 26.06.2017
Herpesviren	HSV1 DNA	X	X	X	X	X	X	X	X	X	X				<i>Herpes-simplex-Virus Typ 1 [pol]</i>
	HSV2 DNA	X	X	X	X	X	X	X	X	X	X				<i>Herpes-simplex-Virus Typ 2 [orf29]</i>
	CMV DNA	X	X	X	X	X	X	X	X	X	X	X			<i>Hum. Zytomegalievirus [glycoprotein B]</i>
	VZV DNA	X	X		X	X	X	X	X	X	X				<i>Varizella-Zoster-Virus [orf28]</i>
	EBV DNA	X	X	X	X	X	X	X	X	X	X				<i>Epstein-Barr-Virus [EBNA]</i>
	HHV-6 DNA	X	X	X	X	X	X	X	X	X	X				<i>Humanes Herpes-Virus Typ 6 [U11]</i>
	HHV-8 DNA	X	X	X	X	X	X	X	X	X	X				<i>Humanes Herpes-Virus Typ 8 [orf26]</i>
Hepatitis Viren	HBV DNA				X	X	X	X	X						<i>Hepatitis-B-Virusotypen A-H [HBX]</i>
	HBV Genotypisierung				X	X	X	X	X						<i>Genotypen A-H</i>
	HCV RNA				X	X	X	X	X						<i>Hepatitis-C-Virusotypen 1-6 [5'-UTR]</i>
	HAV RNA				X	X	X	X	X				X		<i>Hepatitis-A-Virus [5'-UTR]</i>
	HEV RNA				X	X	X	X	X				X		<i>Hepatitis-E-Virus [orf3]</i>
Sonstige Viren	ADV DNA	X	X	X	X	X	X	X	X	X	X				<i>Adenovirus, Subgenera A-F [Hexon]</i>
	HPV DNA		X		X	X	X								<i>Hum. Papilloma-Virus 32 Typen [L1]</i>
	Influenza-A-Virus RNA	X	X	X	X	X	X				X				<i>Influenza-A-Virus [Matrix Protein2]</i>
	Influenza-B-Virus RNA	X	X	X	X	X	X				X				<i>Influenza-B-Virus [Haemagglutinin1]</i>
	RSV RNA	X	X	X	X	X	X				X				<i>Hum. Respir.-Synzytial-Virus [matrix protein]</i>
	HRV RNA			X	X	X	X			X	X				<i>Humanes Rhinovirus [5'-UTR]</i>
	MPV RNA		X	X	X	X	X				X				<i>Humanes Metapneumovirus [fusion protein]</i>
	PIV RNA		X	X	X	X	X				X				<i>Parainfluenzavirus 1-4 [HN]</i>
	JC-Virus DNA	X			X	X	X	X	X			X			<i>JC Polyomavirus [small t-antigen]</i>
	BK-Virus DNA				X	X	X	X	X			X			<i>BK Polyomavirus [small t-antigen]</i>
	Parvovirus B19 DNA				X	X	X	X	X						<i>PVB19 Genotypen 1-3 [orf2]</i>
	Norovirus DNA					X	X							X	<i>Norovirus Genotypen 1-2 [NoV junction]</i>
	Enteroviren RNA	X	X	X	X	X	X	X	X		X		X		<i>Enteroviren (Typisierung optional) [5'-UTR]</i>
Mykobakterien	M. tub. Komplex DNA	X			X	X	X	(X)		X	X	X		X	<i>M. tuberculosis Komplex [IS6110]</i>
	M. tub/africanum/bovis DNA	X			X	X	X			X	X	X		X	<i>Diff. im M. tub. Komplex [RD]</i>
	M. tub. Komplex Mol. Res.	X			X	X	X			X	X	X		X	<i>[rpoB/katG/inhA/embB/gyrA]</i>
	M. tub. Komplex PZA DNA													X	<i>Pyrazinamidresistenz [pncA]</i>
	Mykobakterien DNA	X	X		X	X	X	X		X	X			X	<i>Genus, relev. pathog. Spezies [ITS1]</i>
Bak. Atemwege	Legionella pneumophila DNA				X	X	X			X	X			X	<i>[mip]</i>
	Mycoplasma pneumoniae DNA	X			X	X	X			X	X			X	<i>[repMp1]</i>
	Bordetella pert./parapertussis DNA		X	X	X	X	X			X	X			X	<i>[IS481/1001]</i>
	Chlamydia pneumoniae DNA		X	X	X	X	X			X	X				<i>[MOMP]</i>
	Chlamydia psittaci DNA		X	X	X	X	X			X	X				<i>[rpoB]</i>
	Nocardia DNA	X			X	X	X			X	X			X	<i>Genus, relev. pathog. Spezies [ITS1]</i>
Bakterien – Sonstige	Actinomyces DNA		X		X	X	X				X			X	<i>Genus, relev. pathog. Spezies [16S rDNA]</i>
	Bakterien DNA	X			X	X	X	X						X	<i>Bakterien, alle Spezies [16S rDNA]</i>
	Bartonella DNA				X	X	X								<i>Genus, relev. pathog. Spezies [ITS1]</i>
	Borrelia DNA	(X)			X	X	X								<i>Genus, relev. pathog. Spezies [ospA]</i>
	Chlamydia trachomatis DNA		X		X	X	X				X	X			<i>[MOMP]</i>
	Corynebacterium diphtheriae DNA		X	X	X	X	X							X	<i>Diphtherie- Toxin [Toxin Gen]</i>
	Escherichia coli	X													<i>[β-Glucuronidase]</i>
	EHEC DNA													X	<i>Shigatoxin [stx1/2]</i>
	EPEC DNA													X	<i>Intimin [eae]</i>
	Haemophilus influenzae	X													<i>[hpd]</i>
	Helicobacter pylori DNA				X	X	X							X	<i>Spezies + Clarithromycinresistenz [23s rDNA]</i>
	Listeria monocytogenes DNA	X			X	X	X				X			X	<i>[hlyA]</i>
	Mycoplasma genit./hominis DNA		X		X	X	X					X		X	<i>[gap]</i>
Neisseria gonorrhoeae DNA		X		X	X	X					X		X	<i>[gyrA]</i>	



Labor für Molekulare Diagnostik und Mikrobiologie
Dr. A. Roth - andreas.roth@helios-kliniken.de
Dr. A. Streubel - anna.streubel@helios-kliniken.de
Walterhöferstraße 11 – D-14165 Berlin
Tel.: 8102 63560, -1209, -63481 Fax: -1455

Seite 2 von 2

Leistungsspektrum

Molekulare Mikrobiologie, Pathologie und Genetik

Mikrobiologie (Fortsetzg.)		Liquor	Abstrich	Rachen	Punktat	Gewebe	Paraffin	EDTA Blut	Serum	Sputum	BAL - TS	Urin	Stuhl	Kultur	
Version 8.0 - 08.02.2017															
Bakterien – Sonstige	Neisseria meningitidis DNA	X													[ctrA]
	Staph. aureus Leukocidin DNA												X		[lukS-PVL]
	Staph. aureus MSSA/MRSA DNA												X		Methicillinresistenz [sau spez. Gen + mecA]
	Strep. pneumoniae DNA	X													[pneumolysin]
	Strep. agalactiae DNA	X													[cAMP]
	Treponema pallidum DNA	X	X		X	X	X								[polA]
	Tropheryma whipplei DNA	X			X	X	X								[ITS 1]
	Ureaplasma DNA	X	X		X	X	X				X	X		X	U. urealyticum/parvum [16S rDNA]
	VRE DNA													X	Vancomycinresistenz Enterokokken [vanA/B]
Parasiten/Pilze	Entamoeba histolytica				X	X	X								[18S rDNA]
	Fungi DNA	X	X		X	X	X	X		X			X		Pilze, relev. pathog. Spezies [ITS]
	Leishmania DNA				X	X	X	X							L. donovani/infantum/major [ITS 1]
	Pneumocystis jirovecii DNA				X	X	X		(X)	X					[major surface glycoprotein]
	Toxoplasma gondii DNA	(X)			X	X	X	X			X				[repetitive element]

Pathologie* /Genetik	Erkrankung/Therapie	Anwendung	Zielsequenz [Gen]	
Genetik (EDTA-Blut)	BRAF Genmutation	Melanom, mCRC, PTC u.a.	Diag./ Therapieind.	V600E, V600K [v-raf murine sarcoma viral oncogene homolog B1]
	CALR Genmutation	wie JAK2 (JAK2 Wildtyp)	Diagnose	delins366 bis 370 [calreticulin]
	GNAS1 Genmutation	Fibröse Dysplasie	Diagnose	R201H, R201C [guanine nucl. binding prot., α -stim. activity polypeptid 1]
	H3F3A Genmutation	Knochen-tumore, Chondrome	Diagnose	Codon 34 bis 36 [H3 histone, family 3A]
	H3F3B Genmutation	Knochen-tumore, Chondrome	Diagnose	Codon 34 bis 36 [H3 histone, family 3B]
	IDH1 Genmutation	Gliome	Prognose	Codon 123, 132 [isocitrate dehydrogenase 1 (NADP+), soluble]
	IDH2 Genmutation	Gliome	Prognose	Codon 172 [isocitrate dehydrogenase 2 (NADP+), mitochondrial]
	KIT Genmutation	GIST, Melanom, Mastozytose	Diag./ Therapieind.	Exon 9, 11, 13, 17 [v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog]
	JAK2 Genmutation	Chron. Myeloprolif. Erkrankungen	Diagnose	V617F, D620E [Janus kinase 2]
	MGMT Methylierung	Gliome	Therapieindikation	Exon 1 [O-6-methylguanin-DNA methyltransferase]
	MYD88 Genmutation	Morbus Waldenström	Diagnose	L265P [myeloid differentiation primary response 88]
	PDGFR Genmutation	GIST	Therapieindikation	Exon 12, 18 [platelet-derived growth factor receptor, α -polypeptid]
	RET Genmutation	MTC	Therapieindikation	Codon 918 [rearranged during transfection protooncogene]
	Endopredict	Mammakarzinom	Therapieindikation	Myriad
Genetik (EDTA-Blut)	AAT Genmutation	Protease-Inhibitor-Mangel	Diagnose	Codon 26, 342 [serpin pep. inhib., clade A (α -1 antiproteinase, antitrypsin), member 1]
	ApoB Genmutation	Arteriosklerose/ Cholesterinämie	Risikofaktor	R3500Q [apolipoprotein B]
	ApoE Genmutation	Lipoproteinämie, Alzheimer Krankheit	Risikofaktor	C112R, R158C [apolipoprotein E]
	DPD Genmutation	Therapie mit 5-Fluorouracil	Verträglichkeit	1G>A (Intron) [dihydropyrimidine dehydrogenase]
	F5 Genmutation	Thrombophilie/ APC-Resistenz	Risikofaktor	R506Q [coagulation factor V]
	HFE Genmutation	Hereditäre Hämochromatose	Diagnose	H63D, S65C, C282Y [hemochromatosis]
	MCMC6 Genmutation	Laktose(in)toleranz	Diagnose	C13910T' upstream d. LCT Gens [minichromosome maintenance complex component 6]
	MTHFR Genmutation	Thrombophilie/ Homocysteinämie	Risikofaktor	C677T, A1298C [methylentetrahydrofolate reductase (NAD(P)H)]
	PAI-1 Genmutation	Thrombophilie/ PAI-Aktivität	Risikofaktor	-675 4G/5G [serpin pep. inhib., clade E (nexin, plasm. activ. inhib. type 1), member 1]
	Prothrombin-II Genmutation	Thrombophilie/ Prothrombin-Aktivität	Risikofaktor	G20210A (Intron) [coagulation factor II (prothrombin)]

* EGFR-, RAS-Mutationen und Fusionen sowie Liquid Biopsies werden im NGS Labor untersucht.