



## VIROLOGY SERVICE OFFER

### CLINICAL SAMPLES

**The preferred method for verifying the particular virus is printed in bold.**

Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Pathogen-specific methods</b>						
<b>Chikungunya virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology IgM</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Dengue virus 1-4</b>	<b>Molecular biological detection</b>	real-time PCR	serum, plasma	Tues, Fri	≤2 days	yes
	<b>Serology, IgG</b>	IFA, NS1 Ag LFA	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA, NS1 Ag LFA	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Dobrava virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	serum, plasma, urine, kidney biopsy	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Ebola virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	whole blood	standby service	≤2 days	no
	Culture	cell culture	upon request	--	--	no

<sup>1</sup> accredited method; <sup>2</sup> other materials upon request

Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Tick-borne encephalitis virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	yes
	<b>Serology, IgG</b>	EIA / IFA	serum, plasma, liquor	Tues, Fri	≤2 days	yes
	<b>Serology, IgM</b>	EIA / IFA	serum, plasma, liquor	Tues, Fri	≤2 days	yes
	Neutralising test (total Ig)	NT	upon request	--	--	no
	Culture	cell culture	upon request	--	--	no
<b>Yellow fever virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	Neutralising test (total Ig)	NT	upon request	--	--	no
	Culture	cell culture	upon request	--	--	no
<b>Hantaan virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, urine, kidney biopsy, liver biopsy, spleen biopsy	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Hendra virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	pharyngeal swab, liquor, urine, serum, plasma	Tues, Fri	≤2 days	no
<b>Influenza A viruses</b>	<b>Molecular biological detection</b>	real-time RT-PCR	naso-pharyngeal swab, pharyngeal swab, bronchial rinsing fluid, bronchoalveolar lavage	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no

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Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Influenza A H1N1 virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	naso-pharyngeal swab, pharyngeal swab, bronchial rinsing fluid, bronchoalveolar lavage	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Influenza A H7N9 virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	naso-pharyngeal swab, pharyngeal swab, bronchial rinsing fluid, bronchoalveolar lavage	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Japanese encephalitis virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Krim Congo virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	whole blood	Tues, Fri	≤2 days	no
	Serology, IgG	being established	--	--	--	--
	Serology, IgM	being established	--	--	--	--
	Culture	cell culture	upon request	--	--	no
<b>Lassa virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	whole blood	Tues, Fri	≤2 days	no
<b>Marburg virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	whole blood	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no

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Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>MERS corona virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	naso-pharyngeal secretion / swab, pharyngeal swab, bronchial rinsing fluid, bronchoalveolar lavage	Tues, Fri	≤2 days	no
<b>Monkeypox virus</b>	<b>Molecular biological detection</b>	PCR & sequencing	vesicle/papule/blister/scab material	Tues, Fri	≤1 week	no
	Serology, IgG	ELISA at the genus level	upon request	--	--	--
	Serology, IgM	ELISA at the genus level	upon request	--	--	--
	Culture	cell culture	upon request	--	--	no
<b>Nipah virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	pharyngeal swab, liquor, urine, serum, plasma	Tues, Fri	≤2 days	no
<b>O'Nyong nyong virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Puumala virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, urine, kidney biopsy	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA / IB	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Rift valley fever virus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	serum, plasma	Tues, Fri	≤2 days	no
	Serology, IgG	being established	--	--	--	no
	Serology, IgM	being established	--	--	--	no

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Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Ross river virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, joint puncture, liquor	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Naples sandfly fever virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	being established	--	--	--	no
	<b>Serology, IgM</b>	being established	--	--	--	no
<b>Sicilian sandfly fever virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	being established	--	--	--	no
	<b>Serology, IgM</b>	being established	--	--	--	no
<b>Toscan sandfly fever virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	being established	--	--	--	no
	<b>Serology, IgM</b>	being established	--	--	--	no
<b>SARS-Coronavirus</b>	<b>Molecular biological detection</b>	real-time RT-PCR	naso-pharyngeal secretion/swab, pharyngeal swab, bronchial rinsing fluid, bronchoalveolar lavage	Tues, Fri	≤2 days	no
	<b>Serology, IgG</b>	being established	--	--	--	no
	<b>Serology, IgM</b>	being established	--	--	--	no
<b>Sindbis virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
	<b>Serology, IgG</b>	being established	--	--	--	no
	<b>Serology, IgM</b>	being established	--	--	--	no

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Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Smallpox / variola virus</b>	<b>Molecular biological detection</b>	PCR & sequencing	vesicle/papule/blister/ scab material; early stage: nasopharyngeal secretion/swab, serum, plasma	Tues, Fri	≤1 week	no
	Serology, IgG	ELISA at genus level	upon request	--	--	--
	Serology, IgM	ELISA a at genus level	upon request	--	--	--
	Culture	cell culture	upon request	--	--	no
<b>St. Louis encephalitis virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Vaccinia virus</b>	<b>Molecular biological detection</b>	PCR & sequencing	vesicle/papule/blister/scab material	Tues, Fri	≤1 week	no
	Serology, IgG	ELISA at genus level	upon request	--	--	--
	Serology, IgM	ELISA at genus level	upon request	--	--	--
	Culture	cell culture	upon request	--	--	no
<b>West Nile virus</b>	Molecular biological detection	real-time RT-PCR	serum, plasma, liquor	Tues, Fri	≤2 days	yes
	<b>Serology, IgG</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	<b>Serology, IgM</b>	IFA	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no

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Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
<b>Genus and family specific methods</b>						
<b>Alphaviruses</b> (e.g. <i>chikungunya</i> , eastern equine encephalitis, <i>o'nyon nyong</i> , <i>ross river</i> , <i>sindbis</i> , venezuelan equine encephalitis, western equine encephalitis) <sup>3</sup>	Molecular biological detection	PCR & sequencing	upon request	--	--	no
	Culture	cell culture	upon request	--	--	no
<b>New World arenaviruses</b> (Guanarito, Junin, Machupo, Sabia) <sup>3</sup>	Molecular biological detection	several real-time RT-PCRs; incl. differentiation at species level	upon request	--	--	no
<b>Filoviruses</b> ( <i>Ebola</i> , <i>Marburg</i> ) <sup>3</sup>	<b>Molecular biological detection</b>	endpoint RT-PCR	upon request	--	--	no
<b>Flaviviruses</b> (e.g. <i>Dengue</i> , <i>Japanese encephalitis</i> , TBE, <i>yellow fever</i> , <i>Japanese encephalitis</i> , Louping ill, Murray valley encephalitis, <i>St. Louis encephalitis</i> , Usutu, <i>West Nile</i> , Zika) <sup>3</sup>	Molecular biological detection	PCR & sequencing	upon request	--	--	no
	<b>Serology, IgG</b>	species-specific serologies exist for Dengue, TBE, Yellow Fever, Japanese Encephalitis and West Nile	--	--	--	no
	<b>Serology, IgM</b>		--	--	--	no
	Culture	cell culture	upon request	--	--	no
<b>Hantaviruses</b> (andes, <i>dobrava</i> , <i>hantaan</i> , <i>puumala</i> , seoul, sin nombre) <sup>3</sup>	Molecular biological detection	several real-time RT-PCRs; incl. differentiation at species level	upon request	--	--	no
	<b>Serology, IgG</b>	IFA / IB; incl. differentiation at species level	serum, plasma	Tues, Fri	≤2 days	no

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<sup>3</sup> the species covered with the method are presented in brackets. There are also species-specific methods for species printed in italics.

Pathogen	Examination	Measuring method	Suitable sampling material <sup>2</sup>	Frequency	Duration	Acc. <sup>1</sup>
	<b>Serology, IgM</b>	IFA / IB; incl. differentiation at species level	serum, plasma	Tues, Fri	≤2 days	no
	Culture	cell culture	upon request	--	--	no
<b>Orthopox viruses</b> ( <i>camelpox, cowpox, monkeypox, smallpox, vaccinia</i> ) <sup>3</sup>	<b>Molecular biological detection</b>	PCR & sequencing; incl. differentiation at species level	upon request	--	--	no
	Serology, IgG	ELISA at genus level	upon request	--	--	--
	Serology IgM	ELISA at genus level	upon request	--	--	--
	Culture	cell culture	upon request	--	--	no

<sup>1</sup> accredited method; <sup>2</sup> other materials upon request

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