

GENERAL INFORMATION

This is a list of Assays for Medical Pathogen Diagnostic Services using PCR, Real Time PCR or Sequencing methodologies.

For other assays or further information, please see below and visit www.mbg.ae

For Microbial Genomics, please, refer to Medical Genomics Services **MBG-C0029**

For other assays not listed, individual projects and any other research collaborations, please contact MBG Centre for further information.

Recommended sample types are based on sources such as CDC and WHO and the expertise of MBG Centre.

Notes:

For CL3 pathogens; please contact MBG centre in advance in order to book the facility. For information about Sample Collection, Storage and Transport for CL3 pathogen testing, refer to MBG-C0001. **CL3 pathogens in this list are:** *Chikungunya and Dengue virus, Filovirus (Z-ebola and Marburg virus), Nipah Virus, Rabies Virus, Hantaan virus (HTNV), Rift valley fever virus (RVFV), Crimean-congo hemorrhagic fever virus (CCHFV), Omsk hemorrhagic fever virus (OHFV), Kyasanur forest disease virus (KFDV), Yellow fever virus (YFV), Lujo virus (LUJV), Lassa virus and (LASV), Chapare virus (CHAV).*

- Please provide all the required information on the requisition form to avoid any delay in reporting.
- For Price details please contact MBG.
- Please refer to **MBG-C0014 Sample Collection, Storage and Transport guidelines-Medical** for more information (www.mbg.ae).
- **Turn Around Time:**
 - The turnaround time may increase depending on the sample load.
 - Turnaround time for Pathogen Identification by PCR methodologies is within 1-2 working days.
 - Turnaround time for Pathogen Identification by PCR & Sequencing is within 2-4 working days.

* For RNA viruses testing:

- Samples for these assays (**except EDTA Blood/ CSF**) must be collected in RNA preservative media.
- Tissue samples must be completely submerged in RNA preservative media.
- Culture samples must be sent frozen or in RNA preservative media.
- Samples for these assays **MUST NOT** be sent on FTA cards.
- If samples for RNA virus testing are not in RNA preservative media, they must be frozen immediately and transported in the same condition

Assay Code	ASSAY NAME	Methodology	Recommended Sample Types		Accreditation
			Accredited	Alternatives	
VIRUS DETECTION (Single stranded RNA viruses)*					
HPV-248	Crimean-congo hemorrhagic fever virus (CCHFV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPV-253	Chapare virus (CHAV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPM-020	Coronavirus MERS (Middle East Respiratory Syndrome)	Real-Time RT-PCR	Swab/ Secretion (Respiratory)	-	ISO 15189
HPV-195	CoronavirusSARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2)	Real-Time RT-PCR	Swab/ Secretion (Respiratory)	Culture	ISO 15189
HPF-009	Foot and mouth disease virus (FMDV)	Real-Time RT-PCR		Swab/ Secretion (Respiratory), Culture, Tissue, EDTA Blood,	Validated in-house developed assay
HPF-071	Filovirus (Z-ebola and Marburg virus)	Real-Time RT-PCR	Serum, EDTA Blood	Body Fluids	ISO 15189
HPV-249	Hantaan virus (HTNV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPI-012	Influenza A	Real-Time RT-PCR	Swab/ Secretion (Respiratory)	-	ISO 15189
HPI-201	Influenza B	Real-Time RT-PCR	Swab/ Secretion (Respiratory)	-	ISO 15189
HPI-014	Influenza H9 (inclusive of Influenza A)	Real-Time RT-PCR	-	Swab/ Secretion (Respiratory)	Validated in-house developed assay
HPI-015	Influenza H7 (inclusive of Influenza A)	Real-Time RT-PCR	-	Swab/ Secretion (Respiratory)	Validated kit-based assay
HPI-016	Influenza H5 (inclusive of Influenza A)	Real-Time RT-PCR	-	Swab/ Secretion (Respiratory)	Validated kit-based assay

Assay Code	ASSAY NAME	Methodology	Recommended Sample Types		Accreditation
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VIRUS DETECTION (Single stranded RNA viruses)*					
HPI-017	Influenza N1 (inclusive of Influenza A)	RT-PCR and Gel - electrophoresis	-	Swab/ Secretion (Respiratory)	Validated in-house developed assay
HPV-250	Kyasanur forest disease virus (KFDV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPV-245	Lassa virus (LASV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPV-252	Lujo virus (LUJV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPN-187	Nipah Virus	Real-Time RT-PCR	-	EDTA Blood, CSF, Swab/ Secretion (Respiratory)	Validated in-house developed assay
HPV-251	Omsk hemorrhagic fever virus (OHFV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPR-192	Rabies Virus	Real-Time RT-PCR	-	Saliva, Tissue (brain)	Validated in-house developed assay
HPV-247	Rift valley fever virus (RVFV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPW-078	West Nile virus (WNV)	Real-Time RT-PCR	-	Culture, Tissue, EDTA Blood, Serum, CSF	Validated in-house developed assay
HPV-246	Yellow fever virus (YFV)	Real-Time RT-PCR	-	Serum, EDTA Blood, Body Fluids	Validated in-house developed assay
HPZ-079	Zika virus	Real-Time RT-PCR	Serum	EDTA Blood, Body fluids (Saliva)	ISO 15189
VIRUS DETECTION (DNA viruses)					
HPM-215	Orthopox Virus detection & confirmation	PCR and Sequencing	-	Tissue (Skin Lesion), Swabs /Secretions (Abscess/lesions)	Validated in-house developed assay
HPM-216	Monkeypox Virus	Real-Time PCR	-	Tissue (Skin Lesion), Swabs /Secretions (Abscess/lesions)	Validated in-house developed assay

Assay Code	ASSAY NAME	Methodology	Recommended Sample Types		Accreditation
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BACTERIA DETECTION					
HPB-025	<i>Brucella species</i>	Real-Time PCR	-	EDTA blood, Tissue (Fetal), culture, Swab/ Secretion (Genital), Semen	Validated in-house developed assay
HPB-023	<i>Brucella abortus</i>	Real-Time PCR	-	EDTA blood, Tissue (Fetal), culture, Swab/ Secretion	Validated in-house developed assay
HPB-024	<i>Brucella melitensis</i>	Real-Time PCR	-	EDTA blood, Tissue (Fetal), culture, Swab/ Secretion (Genital), Semen	Validated in-house developed assay
HPC-028	<i>Campylobacter jejuni</i>	Real-Time PCR	-	Culture, Stool, Swab/ Secretion (Rectal)	Validated kit based assay
HPC-029	<i>Campylobacter coli</i>	Real-Time PCR	-	Culture, Stool, Swab/ Secretion (Rectal)	Validated kit based assay
HPC-031	<i>Chlamydomphila species</i>	Real-Time PCR	-	Swab/ Secretion (Conjunctival), Stool, EDTA blood, Culture, Swab/ Secretion	Validated in-house developed assay
HPC-032	<i>Clostridium perfringens</i> (toxin detection)	Multi Real-Time PCR	-	Stool, Swab/ Secretion (Rectal), Culture	Validated in-house developed assay
HPC-033	<i>Coxiella species (C.burnetii, C.symbiont)</i>	Real-Time PCR	-	EDTA blood, Tissue (placental), Culture, Stool, Urine, Amniotic fluid	Validated in-house developed assay
HPL-035	<i>Legionella species</i>	Real-Time PCR	-	Water, Swab/ Secretion (Respiratory), Culture	Validated in-house developed assay
HPL-034	<i>Legionella pneumophila</i>	Real-Time PCR	-	Water, Swab/ Secretion (Respiratory), Culture	Validated in-house developed assay
HPL-036	<i>Leptospira species (Pathogenic.spp)</i>	Real-Time PCR	-	EDTA blood, Swab/ Secretion (Organ), Tissue (biopsy), Culture	Validated in-house developed assay

Assay Code	ASSAY NAME	Methodology	Recommended Sample Types		Accreditation
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BACTERIA DETECTION					
HPM-269	Mycobacterium species	Real-Time PCR	-	EDTA blood, Stool, Swab/ Secretion (Respiratory), Tissue (biopsy), Culture	Validated in-house developed assay
HPM-100	Mycobacterium tuberculosis	Real-Time PCR	-	CSF, Swab/ Secretion (Respiratory), EDTA blood, Urine (for urinary TB)	Validated in-house developed assay
HPM-277	Mycobacterium tuberculosis complex	Multi Real-Time PCR	-	Swab/Secretion (Respiratory), Tissue (Biopsy) , Culture, CSF, Gastric Lavage, EDTA Blood	Validated in-house developed assay
HPM-041	Mycoplasma species (General)	Real-Time PCR	-	Tissue, EDTA blood, Swab/ Secretion (Respiratory), Swab/ Secretion (Conjunctival), Swab/ Secretion (Genital), CSF, Culture	Validated kit-based assay
HPT-049	Trypanosoma species (T.evansi, T.brucei)	Real-Time PCR	-	EDTA Blood, Culture	Validated in-house developed assay
FUNGI DETECTION					
HPA-098	Aspergillus fumigatus / terreus/ flavus(including differentiation)	Multi Real-Time PCR	-	Culture, EDTA Blood, Swab/Secretion (Respiratory), Tissue (biopsy)	Validated in-house developed assay
HPA-189	Aspergillus fumigatus: Azole-resistance profiling of Cyp51A gene	PCR and Sequencing	-	Culture, EDTA Blood, Swab/Secretion (Respiratory), Tissue (biopsy)	Validated in-house developed assay
Panel					
HPI-070	Influenza Panel * Influenza A Influenza B Influenza H1N1	Real-Time RT-PCR	Swab/ Secretion (Respiratory)	-	ISO 15189