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LABORATORY LOCATION:	Institute for Medical Research (IMR) Shah Alam
(PERMANENT LABORATORY)	Institut Penyelidikan Perubatan / Institute for Medical Research
国際政党対抗国 2000年の1922年	(IMR), National Institutes of Health (NIH), Block C, No.1, Jalan Setia
	Murni U13/52 Seksyen U13 Setia Alam 40170 Shah Alam, Selangor,
	40170,
Care Care	SELANGOR
	MALAYSIA
ACCREDITED SINCE :	19 MARCH 2025
FIELD(S) OF MEDICAL TESTING:	HAEMATOLOGY (CANCER RESEARCH CENTER /
	HAEMATOLOGY UNIT)
	MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH
	CENTER / BACTERIOLOGY UNIT)
	MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY
	RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)
	MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY
	RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)
	MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY
	RESEARCH CENTER / ALLERGY UNIT)
	MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY
	RESEARCH CENTER / AUTOIMMUNE UNIT)
	MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH
	CENTER / VIROLOGY UNIT)
	MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH
	CENTER / PARASITOLOGY UNIT)
	HISTOPATHOLOGY (CANCER RESEARCH CENTER /
	STOMATOLOGY UNIT)
	CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE/
	SPECIAL PROTEIN UNIT)
	CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE
	/ BIOCHEMISTRY UNIT)
	MOLECULAR TESTING (SPECIALISED DIAGNOSTICS CENTRE /
	MOLECULAR DIAGNOSTICS UNIT)

The standard used for assessment of this laboratory is MS ISO 15189:2022 (ISO 15189:2022, IDT).

A medical laboratory's fulfilment of the requirements of ISO 15189 means the laboratory meets both the technical competence requirements and the management system requirements necessary for it to consistently deliver technically valid test results. The management system requirements in ISO 15189 are written in language relevant to a medical laboratory's operations. Medical laboratories that implement ISO 15189 operate generally in accordance with the principles of ISO 9001. (See Joint IAF-ILAC-ISO Communiquè, November 2021)

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CENTRAL LOCATION	Institute for Medical Research (IMR) Shah Alam Institut Penyelidikan Perubatan / Institute for Medical Research (IMR), National Institutes of Health (NIH), Block C, No.1, Jalan Setia Murni U13/52 Seksyen U13 Setia Alam 40170 Shah Alam, Selangor, 40170, Selangor
FIELD(S) OF MEDICAL TESTING:	HAEMATOLOGY (CANCER RESEARCH CENTER / HAEMATOLOGY UNIT), MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)HISTOPATHOLOGY (CANCER RESEARCH CENTER / STOMATOLOGY UNIT)CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE/ SPECIAL PROTEIN UNIT)CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE / BIOCHEMISTRY UNIT)MOLECULAR TESTING (SPECIALISED DIAGNOSTICS CENTRE / MOLECULAR DIAGNOSTICS UNIT)

SCOPE OF MEDICAL TESTING: HAEMATOLOGY (CANCER RESEARCH CENTER / HAEMATOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Detection of Beta Thalassaemia	Multiplex-GAP PCR as
		documented in
		IMR/CaRC/HAEM/22/2201/03(08
)

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods,Specifications/ Equipment/Techniques Used
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Clinical Specimens	Fungal culture	Conventional Culture Method as
Similar Specimens	r angar canare	documented in
		IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolatos For Identification	Fungal identification	Conventional Culture Method as
Fungal Isolates For Identification	rungai identification	
		documented in
		IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for	Sensititre Microboth Dilution
	yeast	method as documented in
		Conventional Susceptibility
		Testing procedure
		IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral	In-house Microagglutination Test
	antibody using the	(MAT) as documented in
	microagglutination test (MAT)	IMR/IDRC/BACT/SOP/34
Bacteria Isolates	Identification of aerobes for	Conventional Culture
	reference identification	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial	Conventional Culture
	susceptibility testing	identification Method as
	, , ,	documented in
		IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as
	·	documented in
		IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body	Mycobacterium tuberculosis	Real Time PCR Methods as
Fluids	(MTB) PCR	documented in
		IMR/IDRC/BACT/SOP/13

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for yeast	Sensititre Microboth Dilution method as documented in Conventional Susceptibility Testing procedure IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral antibody using the microagglutination test (MAT)	In-house Microagglutination Test (MAT) as documented in IMR/IDRC/BACT/SOP/34

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Bacteria Isolates	Identification of aerobes for	Conventional Culture
	reference identification	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial	Conventional Culture
	susceptibility testing	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as
		documented in
		IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body	Mycobacterium tuberculosis	Real Time PCR Methods as
Fluids	(MTB) PCR	documented in
		IMR/IDRC/BACT/SOP/13

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for yeast	Sensititre Microboth Dilution method as documented in Conventional Susceptibility Testing procedure IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral antibody using the microagglutination test (MAT)	In-house Microagglutination Test (MAT) as documented in IMR/IDRC/BACT/SOP/34
Bacteria Isolates	Identification of aerobes for reference identification	Conventional Culture identification Method as documented in IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial susceptibility testing	Conventional Culture identification Method as documented in IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as documented in IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body Fluids	Mycobacterium tuberculosis (MTB) PCR	Real Time PCR Methods as documented in IMR/IDRC/BACT/SOP/13

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SCOPE OF MEDICAL TESTING : MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as
		documented in
		IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as
		documented in
		IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for	Sensititre Microboth Dilution
	yeast	method as documented in
		Conventional Susceptibility
		Testing procedure
		IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral	In-house Microagglutination Test
	antibody using the	(MAT) as documented in
	microagglutination test (MAT)	IMR/IDRC/BACT/SOP/34
Bacteria Isolates	Identification of aerobes for	Conventional Culture
	reference identification	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial	Conventional Culture
	susceptibility testing	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as
		documented in
		IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body	Mycobacterium tuberculosis	Real Time PCR Methods as
Fluids	(MTB) PCR	documented in
		IMR/IDRC/BACT/SOP/13

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part1

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Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for yeast	Sensititre Microboth Dilution method as documented in Conventional Susceptibility Testing procedure IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral antibody using the microagglutination test (MAT)	In-house Microagglutination Test (MAT) as documented in IMR/IDRC/BACT/SOP/34
Bacteria Isolates	Identification of aerobes for reference identification	Conventional Culture identification Method as documented in IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial susceptibility testing	Conventional Culture identification Method as documented in IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as documented in IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body Fluids	Mycobacterium tuberculosis (MTB) PCR	Real Time PCR Methods as documented in IMR/IDRC/BACT/SOP/13

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as documented in IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for yeast	Sensititre Microboth Dilution method as documented in Conventional Susceptibility Testing procedure IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral antibody using the microagglutination test (MAT)	In-house Microagglutination Test (MAT) as documented in IMR/IDRC/BACT/SOP/34

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Bacteria Isolates	Identification of aerobes for	Conventional Culture
	reference identification	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial	Conventional Culture
	susceptibility testing	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as
		documented in
		IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body	Mycobacterium tuberculosis	Real Time PCR Methods as
Fluids	(MTB) PCR	documented in
		IMR/IDRC/BACT/SOP/13

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Clinical Specimens	Fungal culture	Conventional Culture Method as
		documented in
		IMR/IDRC/BACT/SOP/03/Part1
Fungal Isolates For Identification	Fungal identification	Conventional Culture Method as
		documented in
		IMR/IDRC/BACT/SOP/03/Part 2
Yeast Isolates	Antifungal susceptibility test for	Sensititre Microboth Dilution
	yeast	method as documented in
		Conventional Susceptibility
		Testing procedure
		IMR/IDRC/BACT/SOP/03/Part4
Serum	Detection of total antileptospiral	In-house Microagglutination Test
	antibody using the	(MAT) as documented in
	microagglutination test (MAT)	IMR/IDRC/BACT/SOP/34
Bacteria Isolates	Identification of aerobes for	Conventional Culture
	reference identification	identification Method as
		documented in
		IMR/IDRC/BACT/SOP/23
	Verification of antimicrobial	Conventional Culture
	susceptibility testing	identification Method as
	, , ,	documented in
		IMR/IDRC/BACT/SOP/04
Npa, Pernasal Swab	Bordetella pertussis PCR	Real Time PCR Methods as
	·	documented in
		IMR/IDRC/BACT/SOP/35
Sputum, Pus, Csf & Other Body	Mycobacterium tuberculosis	Real Time PCR Methods as
Fluids	(MTB) PCR	documented in
		IMR/IDRC/BACT/SOP/13

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration	Flowcytometry as documented in
	(TBNK)	IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration	Flowcytometry as documented in
	(TBNK)	IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration (TBNK)	Flowcytometry as documented in IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration	Flowcytometry as documented in
	(TBNK)	IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING : MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

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Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration (TBNK)	Flowcytometry as documented in IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration	Flowcytometry as documented in
	(TBNK)	IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Lymphocyte Subset Enumeration	Flowcytometry as documented in
	(TBNK)	IMR/AIRC/PID/SOP/1

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
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Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Human Leukocyte Antigen (HLA)	Microlymphocytotoxicity Test as
	Crossmatch Test	documented in
		IMR/AIRC/TI/SOP/1
Blood/ Saliva/ Buccal Swab	HLA typing Class I and II	Polymerase Chain Reaction
		(PCR) as documented in
		IMR/AIRC/TI/SOP/2

SCOPE OF MEDICAL TESTING : MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

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Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as documented in IMR/AIRC/AL/SOP/1

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Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
	documented in
	IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum / Plasma	Total Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/1
	Specific Immunoglobulin E (Ig E)	Fluoro Enzyme Immunoassay as
		documented in
		IMR/AIRC/AL/SOP/2

SCOPE OF MEDICAL TESTING : MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate Receptor Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/AQ4-2

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Paraneoplastic Neurological	Immunoblot as documented in
Syndrome Antibodies	IMR/AIRC/AI/SOP/PNS-3
Amphiphysin, CV2, PNMA	
(Ma2/Ta), Ri, Yo, Hu, recoverin,	
SOX1, titin, zic4, GAD65 and Tr	
(DNER).	

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate	Indirect immunofluorescence (IIF)
	Receptor Antibody	as documented in
		IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF)
		as documented in
		IMR/AIRC/AI/SOP/AQ4-2
	Paraneoplastic Neurological	Immunoblot as documented in
	Syndrome Antibodies	IMR/AIRC/AI/SOP/PNS-3
	Amphiphysin, CV2, PNMA	
	(Ma2/Ta), Ri, Yo, Hu, recoverin,	
	SOX1, titin, zic4, GAD65 and Tr	
	(DNER).	

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate Receptor Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/AQ4-2
	Paraneoplastic Neurological Syndrome Antibodies Amphiphysin, CV2, PNMA (Ma2/Ta), Ri, Yo, Hu, recoverin, SOX1, titin, zic4, GAD65 and Tr (DNER).	Immunoblot as documented in IMR/AIRC/AI/SOP/PNS-3

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate Receptor Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/AQ4-2
	Paraneoplastic Neurological Syndrome Antibodies Amphiphysin, CV2, PNMA (Ma2/Ta), Ri, Yo, Hu, recoverin, SOX1, titin, zic4, GAD65 and Tr (DNER).	Immunoblot as documented in IMR/AIRC/AI/SOP/PNS-3

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate Receptor Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF) as documented in IMR/AIRC/AI/SOP/AQ4-2
	Paraneoplastic Neurological Syndrome Antibodies Amphiphysin, CV2, PNMA (Ma2/Ta), Ri, Yo, Hu, recoverin, SOX1, titin, zic4, GAD65 and Tr (DNER).	Immunoblot as documented in IMR/AIRC/AI/SOP/PNS-3

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate Receptor Antibody	Indirect immunofluorescence (IIF) as documented in
	Treooptor Antibody	IMR/AIRC/AI/SOP/NMDAR-1

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Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF)
	as documented in
	IMR/AIRC/AI/SOP/AQ4-2
Paraneoplastic Neurological	Immunoblot as documented in
Syndrome Antibodies	IMR/AIRC/AI/SOP/PNS-3
Amphiphysin, CV2, PNMA	
(Ma2/Ta), Ri, Yo, Hu, recoverin,	
SOX1, titin, zic4, GAD65 and Tr	
(DNER).	

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum Cerebrospinal Fluid	Anti-N-Methyl-D-Aspartate	Indirect immunofluorescence (IIF)
	Receptor Antibody	as documented in
		IMR/AIRC/AI/SOP/NMDAR-1
	Anti-Aquaporin-4 Antibody	Indirect immunofluorescence (IIF)
		as documented in
		IMR/AIRC/AI/SOP/AQ4-2
	Paraneoplastic Neurological	Immunoblot as documented in
	Syndrome Antibodies	IMR/AIRC/AI/SOP/PNS-3
	Amphiphysin, CV2, PNMA	
	(Ma2/Ta), Ri, Yo, Hu, recoverin,	
	SOX1, titin, zic4, GAD65 and Tr	
	(DNER).	

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / BACTERIOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
		IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA)
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 and
		IMR/IDRC/VIRO/SOP/HIV/04

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HIV-1 RNA PCR	Real-time Polymerase Chain Reaction (PCR)/ Abbott m2000 Real Time System as documented in IMR/IDRC/VIRO/SOP/HIV/07
HIV Viral Load	Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 System & Abbott m2000 Real Time System as documented in IMR/IDRC/VIRO/SOP/HIV/09
HAV IgM	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/01
HBsAg	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/02
HBsAg Confirmatory	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/03
HBsAb	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/04
HBeAg	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/05
HBeAb	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/06
HBcAb (Total)	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/07
HBcAb (IgM)	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/08
HCV Ab	Enzyme Immunoassay (EIA) / ELISA washer, ELISA reader, 37°C incubator as documented in IMR/IDRC/VIRO/SOP/HEP/09
HCV RNA Qualitative and Quantitative	Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 / Abbot m2000rt Real Time System as documented in IMR/IDRC/VIRO/SOP/HEP/10

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	HCV Genotyping	Polymerase Chain Reaction (PCR) / Cobas 4800 System as documented in IMR/IDRC/VIRO/SOP/HEP/11
Plasma	HIV Genotypic Resistance – Protease and Reverse Transcriptase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance – Integrase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/11
Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/ 12
Serum/plasma/ Cerebrospinal Fluid (csf) / Tissue Biopsies	Dengue Multiplex RT- PCR (Inclusive of DEN1, DEN2, DEN3, and DEN4)	Real Time RT-PCR Polymerase Chain Reaction (PCR) as documented in IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
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Plasma	HIV Ab & Ag	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
	1107.01	IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA)
		as documented in
	110/ 11/ (0 / 6 / 1 / 1)	IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 and
	LING A DAMA DOD	IMR/IDRC/VIRO/SOP/HIV/04
	HIV-1 RNA PCR	Real-time Polymerase Chain
		Reaction (PCR)/ Abbott m2000
		Real Time System as
		documented in
	1111///:111	IMR/IDRC/VIRO/SOP/HIV/07
	HIV Viral Load	Real-time Polymerase Chain
		Reaction (PCR)/ Cobas 4800
		System & Abbott m2000 Real
		Time System as documented in IMR/IDRC/VIRO/SOP/HIV/09
	HAV IgM	Electrochemiluminescence
	HAV Igivi	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/01
	HBsAg	Electrochemiluminescence
	Tibong	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/02
	HBsAg Confirmatory	Electrochemiluminescence
	in the left of the	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/03
	HBsAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/04
	HBeAg	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/05
	HBeAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/06
	HBcAb (Total)	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/07
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	HBcAb (IgM)	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/08
	HCV Ab	Enzyme Immunoassay (EIA) / ELISA washer, ELISA reader, 37°C incubator as documented in IMR/IDRC/VIRO/SOP/HEP/09
	HCV RNA Qualitative and Quantitative	Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 / Abbot m2000rt Real Time System as documented in IMR/IDRC/VIRO/SOP/HEP/10
	HCV Genotyping	Polymerase Chain Reaction (PCR) / Cobas 4800 System as documented in IMR/IDRC/VIRO/SOP/HEP/11
Plasma	HIV Genotypic Resistance – Protease and Reverse Transcriptase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance – Integrase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/11
Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/ 12

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Serum/plasma/ Cerebrospinal Fluid	Dengue Multiplex RT- PCR	Real Time RT-PCR Polymerase
(csf) / Tissue Biopsies	(Inclusive of DEN1, DEN2, DEN3,	Chain Reaction (PCR) as
	and DEN4)	documented in
		IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
		IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA)
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 and
		IMR/IDRC/VIRO/SOP/HIV/04
	HIV-1 RNA PCR	Real-time Polymerase Chain
		Reaction (PCR)/ Abbott m2000
		Real Time System as
		documented in
	LINAY COLL COL	IMR/IDRC/VIRO/SOP/HIV/07
	HIV Viral Load	Real-time Polymerase Chain
		Reaction (PCR)/ Cobas 4800
		System & Abbott m2000 Real
		Time System as documented in
	LIAV/IaM	IMR/IDRC/VIRO/SOP/HIV/09 Electrochemiluminescence
	HAV IgM	
		Immunoassay (ECLIA) / Roche Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/01
	HBsAg	Electrochemiluminescence
	пьзау	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/02
	HBsAg Confirmatory	Electrochemiluminescence
	TIDSAG Committatory	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/03
	HBsAb	Electrochemiluminescence
	. 120/10	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/04
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	HBeAg	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/05
	HBeAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/06
	HBcAb (Total)	Electrochemiluminescence
	,	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/07
	HBcAb (IgM)	Electrochemiluminescence
	, , , , , , , , , , , , , , , , , , ,	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/08
	HCV Ab	Enzyme Immunoassay (EIA) /
		ELISA washer, ELISA reader,
		37°C incubator as documented
		in IMR/IDRC/VIRO/SOP/HEP/09
	HCV RNA Qualitative and	Real-time Polymerase Chain
	Quantitative	Reaction (PCR)/ Cobas 4800 /
	Quantitative	Abbot m2000rt Real Time
		System as documented in
	LICV/ Constructor	IMR/IDRC/VIRO/SOP/HEP/10
	HCV Genotyping	Polymerase Chain Reaction
		(PCR) / Cobas 4800 System as
		documented in
Di	1111/0	IMR/IDRC/VIRO/SOP/HEP/11
Plasma	HIV Genotypic Resistance –	Polymerase Chain Reaction
	Protease and Reverse	(PCR) and Population-based
	Transcriptase	Genome Sequencing / Eppendorf
		Mastercycler X50s thermal cycler
		as documented in
	1111/0	IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance –	Polymerase Chain Reaction
	Integrase	(PCR) and Population-based
		Genome Sequencing / Eppendorf
		Mastercycler X50s thermal cycler
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/11
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Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/12
Serum/plasma/ Cerebrospinal Fluid (csf) / Tissue Biopsies	Dengue Multiplex RT- PCR (Inclusive of DEN1, DEN2, DEN3, and DEN4)	Real Time RT-PCR Polymerase Chain Reaction (PCR) as documented in IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
		IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA)
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 and
		IMR/IDRC/VIRO/SOP/HIV/04
	HIV-1 RNA PCR	Real-time Polymerase Chain
		Reaction (PCR)/ Abbott m2000
		Real Time System as
		documented in
		IMR/IDRC/VIRO/SOP/HIV/07

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HIV Viral Load	Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 System & Abbott m2000 Real Time System as documented in IMR/IDRC/VIRO/SOP/HIV/09
HAV IgM	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/01
HBsAg	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/02
HBsAg Confirmatory	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/03
HBsAb	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/04
HBeAg	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/05
HBeAb	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/06
HBcAb (Total)	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/07
HBcAb (IgM)	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/08
HCV Ab	Enzyme Immunoassay (EIA) / ELISA washer, ELISA reader, 37°C incubator as documented in IMR/IDRC/VIRO/SOP/HEP/09
HCV RNA Qualitative and Quantitative	Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 / Abbot m2000rt Real Time System as documented in IMR/IDRC/VIRO/SOP/HEP/10
HCV Genotyping	Polymerase Chain Reaction (PCR) / Cobas 4800 System as documented in IMR/IDRC/VIRO/SOP/HEP/11

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Plasma	HIV Genotypic Resistance – Protease and Reverse Transcriptase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance – Integrase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/11
Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/ 12
Serum/plasma/ Cerebrospinal Fluid (csf) / Tissue Biopsies	Dengue Multiplex RT- PCR (Inclusive of DEN1, DEN2, DEN3, and DEN4)	Real Time RT-PCR Polymerase Chain Reaction (PCR) as documented in IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence Immunoassay (ECLIA) / Roche Cobas e411 as documented in IMR/IDRC/VIRO/SOP/HIV/01

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HIV Ab	Particle Agglutination Assay (PA)
	as documented in IMR/IDRC/VIRO/SOP/HIV/02
HIV Ab (Confirmatory)	Western Blot (WB) / Platform
The Ab (Committatory)	Shaker as documented in
	IMR/IDRC/VIRO/SOP/HIV/03 and
	IMR/IDRC/VIRO/SOP/HIV/04
HIV-1 RNA PCR	Real-time Polymerase Chain
_	Reaction (PCR)/ Abbott m2000
	Real Time System as
	documented in
	IMR/IDRC/VIRO/SOP/HIV/07
HIV Viral Load	Real-time Polymerase Chain
	Reaction (PCR)/ Cobas 4800
	System & Abbott m2000 Real
	Time System as documented in
1107/1-84	IMR/IDRC/VIRO/SOP/HIV/09
HAV IgM	Electrochemiluminescence
	Immunoassay (ECLIA) / Roche Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/01
HBsAg	Electrochemiluminescence
1.1257.tg	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/02
HBsAg Confirmatory	Electrochemiluminescence
	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in
LID. AL	IMR/IDRC/VIRO/SOP/HEP/03
HBsAb	Electrochemiluminescence
	Immunoassay (ECLIA) / Roche Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/04
HBeAg	Electrochemiluminescence
11207 (9	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/05
HBeAb	Electrochemiluminescence
	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/06
HBcAb (Total)	Electrochemiluminescence
	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/07
HBcAb (IgM)	Electrochemiluminescence
ribo, to (igivi)	Immunoassay (ECLIA) / Roche
	Cobas e 411 as documented in
	IMR/IDRC/VIRO/SOP/HEP/08

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	HCV Ab HCV RNA Qualitative and Quantitative	Enzyme Immunoassay (EIA) / ELISA washer, ELISA reader, 37°C incubator as documented in IMR/IDRC/VIRO/SOP/HEP/09 Real-time Polymerase Chain Reaction (PCR)/ Cobas 4800 /
		Abbot m2000rt Real Time System as documented in IMR/IDRC/VIRO/SOP/HEP/10
	HCV Genotyping	Polymerase Chain Reaction (PCR) / Cobas 4800 System as documented in IMR/IDRC/VIRO/SOP/HEP/11
Plasma	HIV Genotypic Resistance – Protease and Reverse Transcriptase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance – Integrase	Polymerase Chain Reaction (PCR) and Population-based Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler as documented in IMR/IDRC/VIRO/SOP/HIV/11
Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/ 12
Serum/plasma/ Cerebrospinal Fluid (csf) / Tissue Biopsies	Dengue Multiplex RT- PCR (Inclusive of DEN1, DEN2, DEN3, and DEN4)	Real Time RT-PCR Polymerase Chain Reaction (PCR) as documented in IMR/IDRC/VIRO/SOP/MOL/07

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence
Plasilia	TIIV AD & Ag	Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
	LUNZAL	IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA
		as documented in
	1111/41/00 (5 1 1)	IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 an
		IMR/IDRC/VIRO/SOP/HIV/04
	HIV-1 RNA PCR	Real-time Polymerase Chain
		Reaction (PCR)/ Abbott m2000
		Real Time System as
		documented in
		IMR/IDRC/VIRO/SOP/HIV/07
	HIV Viral Load	Real-time Polymerase Chain
		Reaction (PCR)/ Cobas 4800
		System & Abbott m2000 Real
		Time System as documented in
		IMR/IDRC/VIRO/SOP/HIV/09
	HAV IgM	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/01
	HBsAg	Electrochemiluminescence
	Tibong	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/02
	HBsAg Confirmatory	Electrochemiluminescence
	nbsAg Committatory	
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
	LID-AL	IMR/IDRC/VIRO/SOP/HEP/03
	HBsAb	Electrochemiluminescence
HBeAg		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/04
	HBeAg	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/05
	HBeAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/06

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	IID 41 /T 4 11	
	HBcAb (Total)	Electrochemiluminescence Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in IMR/IDRC/VIRO/SOP/HEP/07
	HBcAb (IgM)	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/08
	HCV Ab	Enzyme Immunoassay (EIA) / ELISA washer, ELISA reader,
		37°C incubator as documented in IMR/IDRC/VIRO/SOP/HEP/09
	HCV RNA Qualitative and	Real-time Polymerase Chain
	Quantitative	Reaction (PCR)/ Cobas 4800 / Abbot m2000rt Real Time
		System as documented in
	LICY/ Construction	IMR/IDRC/VIRO/SOP/HEP/10
	HCV Genotyping	Polymerase Chain Reaction (PCR) / Cobas 4800 System as documented in
Plasma	HIV Genotypic Resistance –	IMR/IDRC/VIRO/SOP/HEP/11 Polymerase Chain Reaction
, idenia	Protease and Reverse	(PCR) and Population-based
	Transcriptase	Genome Sequencing / Eppendorf Mastercycler X50s thermal cycler
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance – Integrase	Polymerase Chain Reaction (PCR) and Population-based
	Integrase	Genome Sequencing / Eppendorf
		Mastercycler X50s thermal cycler as documented in
		IMR/IDRC/VIRO/SOP/HIV/11
Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/	Virus Isolation and Identification: Human Influenza and other	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/	respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	
Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body		
Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/		
Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf		
2.555,,555, 65.		

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Bronchoalveolar Lavage Tracheal	Influenza Real-Time RT PCR	Real Time RT PCR as
Aspirates Sputum Nasopharyngeal		documented
/ Oropharyngeal Aspirates /		in IMR/IDRC/VIRO/SOP/MOL/02
Washes Nasopharyngeal /		and IMR/IDRC/VIRO/SOP/MOL/
Oropharyngeal Swabs		12
Serum/plasma/ Cerebrospinal Fluid	Dengue Multiplex RT- PCR	Real Time RT-PCR Polymerase
(csf) / Tissue Biopsies	(Inclusive of DEN1, DEN2, DEN3,	Chain Reaction (PCR) as
	and DEN4)	documented in
		IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Plasma	HIV Ab & Ag	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e411 as documented in
		IMR/IDRC/VIRO/SOP/HIV/01
	HIV Ab	Particle Agglutination Assay (PA)
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/02
	HIV Ab (Confirmatory)	Western Blot (WB) / Platform
		Shaker as documented in
		IMR/IDRC/VIRO/SOP/HIV/03 and
		IMR/IDRC/VIRO/SOP/HIV/04
	HIV-1 RNA PCR	Real-time Polymerase Chain
		Reaction (PCR)/ Abbott m2000
		Real Time System as
		documented in
		IMR/IDRC/VIRO/SOP/HIV/07
	HIV Viral Load	Real-time Polymerase Chain
		Reaction (PCR)/ Cobas 4800
		System & Abbott m2000 Real
		Time System as documented in
		IMR/IDRC/VIRO/SOP/HIV/09
	HAV IgM	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/01
	HBsAg	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/02
	HBsAg Confirmatory	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/03

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	HBsAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/04
	HBeAg	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/05
	HBeAb	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/06
	HBcAb (Total)	Electrochemiluminescence
		Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/07
	HBcAb (IgM)	Electrochemiluminescence
	1 - 1	Immunoassay (ECLIA) / Roche
		Cobas e 411 as documented in
		IMR/IDRC/VIRO/SOP/HEP/08
	HCV Ab	Enzyme Immunoassay (EIA) /
		ELISA washer, ELISA reader,
		37°C incubator as documented
		in IMR/IDRC/VIRO/SOP/HEP/09
	HCV RNA Qualitative and	Real-time Polymerase Chain
	Quantitative	Reaction (PCR)/ Cobas 4800 /
		Abbot m2000rt Real Time
		System as documented in
		IMR/IDRC/VIRO/SOP/HEP/10
	HCV Genotyping	Polymerase Chain Reaction
	3	(PCR) / Cobas 4800 System as
		documented in
		IMR/IDRC/VIRO/SOP/HEP/11
Plasma	HIV Genotypic Resistance –	Polymerase Chain Reaction
	Protease and Reverse	(PCR) and Population-based
	Transcriptase	Genome Sequencing / Eppendorf
		Mastercycler X50s thermal cycler
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/10
	HIV Genotypic Resistance –	Polymerase Chain Reaction
	Integrase	(PCR) and Population-based
		Genome Sequencing / Eppendorf
		Mastercycler X50s thermal cycler
		as documented in
		IMR/IDRC/VIRO/SOP/HIV/11

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Nasal Aspirate (na)/ Nasal Wash (nw)/ Nasopharyngeal Swab (nps)/ Nasopharyngeal Aspirate (npa)/ Oral Swab (os)/ Oropharyngeal Swab (ops)/ Throat Swab (ts)/ Sputum/ Tracheal Aspirate (ta)/ Bronchial Wash (bw)/bronchoalveolar Lavage (bal)/ Pleural Fluid/ Pericardial Fluid/ Cerebrospinal Fluid (csf)/ Body Fluids/ Stool/ Eye Swab/ Vesicular Swab/ Ulcer Swab/ Rectal Swab/ Organ Swab/ Tissue Biopsy,swabs/ Csf/ Body Fluids/ Tissue Biopsy,stool/ Csf	Virus Isolation and Identification: Human Influenza and other respiratory viruses, Polioviruses, Enteroviruses, CMV, HSV	Isolation as documented in IMR/IDRC/VIRO/SOP/TC/05-13
Bronchoalveolar Lavage Tracheal Aspirates Sputum Nasopharyngeal / Oropharyngeal Aspirates / Washes Nasopharyngeal / Oropharyngeal Swabs	Influenza Real-Time RT PCR	Real Time RT PCR as documented in IMR/IDRC/VIRO/SOP/MOL/02 and IMR/IDRC/VIRO/SOP/MOL/ 12
Serum/plasma/ Cerebrospinal Fluid (csf) / Tissue Biopsies	Dengue Multiplex RT- PCR (Inclusive of DEN1, DEN2, DEN3, and DEN4)	Real Time RT-PCR Polymerase Chain Reaction (PCR) as documented in IMR/IDRC/VIRO/SOP/MOL/07

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH **CENTER / BACTERIOLOGY UNIT)**

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels:	Enzyme-Linked Immunosorbent
	Amoebiasis IgG	Assay / BIOTEK ELISA Machine
		Method as documented in
		IMR/IDRC/PST/SOP/1-4

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / PRIMARY IMMUNODEFICIENCY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels: Amoebiasis IgG	Enzyme-Linked Immunosorbent Assay / BIOTEK ELISA Machine
	Amocbiasis igo	Method as documented in IMR/IDRC/PST/SOP/1-4

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / TRANSPLANTATION IMMUNOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels:	Enzyme-Linked Immunosorbent
	Amoebiasis IgG	Assay / BIOTEK ELISA Machine
		Method as documented in
		IMR/IDRC/PST/SOP/1-4

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / ALLERGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels: Amoebiasis IgG	Enzyme-Linked Immunosorbent Assay / BIOTEK ELISA Machine Method as documented in IMR/IDRC/PST/SOP/1-4

SCOPE OF MEDICAL TESTING : MEDICAL MICROBIOLOGY (ALLERGY AND IMMUNOLOGY RESEARCH CENTER / AUTOIMMUNE UNIT)

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels: Amoebiasis IgG	Enzyme-Linked Immunosorbent Assay / BIOTEK ELISA Machine
		Method as documented in IMR/IDRC/PST/SOP/1-4

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / VIROLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels:	Enzyme-Linked Immunosorbent
	Amoebiasis IgG	Assay / BIOTEK ELISA Machine
		Method as documented in
		IMR/IDRC/PST/SOP/1-4

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (INFECTIOUS DISEASES RESEARCH CENTER / PARASITOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Serum/plasma	Anti-parasitic antibody levels:	Enzyme-Linked Immunosorbent
	Amoebiasis IgG	Assay / BIOTEK ELISA Machine
		Method as documented in
		IMR/IDRC/PST/SOP/1-4

SCOPE OF MEDICAL TESTING: HISTOPATHOLOGY (CANCER RESEARCH CENTER / STOMATOLOGY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Formalin Fixed Specimen Tissue	Histopathology to detect	Haematoxylin and eosin staining
(biopsy Specimen From Oral And	pathology in tissue section using	inclusive of
Maxillofacial Region)	haematoxylin and eosin staining.	immunohistochemistry and
		special stain (if required) as
		documented in Stomatology
		Laboratory Manual.

SCOPE OF MEDICAL TESTING : CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE/SPECIAL PROTEIN UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Special Chemistry	Alpha-1-Antitrypsin Phenotyping	A1AT Isofocusing as documented
Plasma/serum/ Csf/urine		in IMR/SDC/PK/SOP-10 (SEBIA
		HYDRASIS electrophoresis
		system)
	Transferrin Isoform	Capillary Electrophoresis as
		documented in
		IMR/SDC/PK/SOP-9
		(SEBIACAPILLARYS SYSTEM)

SCOPE OF MEDICAL TESTING : CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE / BIOCHEMISTRY UNIT)

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Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Special Chemistry	Alpha-1-Antitrypsin Phenotyping	A1AT Isofocusing as documented
Plasma/serum/ Csf/urine		in IMR/SDC/PK/SOP-10 (SEBIA
		HYDRASIS electrophoresis
		system)
	Transferrin Isoform	Capillary Electrophoresis as
		documented in
		IMR/SDC/PK/SOP-9
		(SEBIACAPILLARYS SYSTEM)

SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE/SPECIAL PROTEIN UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Dried Blood Spot	Total galactose	Enzymatic End Point as
		documented in
		IMR/SDC/BC/SOP-13(1) / Tecan
		F200 Spectrofluorometer
	GALT	Enzymatic End Point as
		documented in
		IMR/SDC/BC/SOP-13(2) / Tecan
		F200 Spectrofluorometer
Plasma/serum /csf / Urine	Free Amino Acids	Ion Exchange Chromatography
		as Documented in
		IMR/SDC/BC/SOP-1 (IE) /
		Biochrom 30
		Reverse-phase Chromatography
		as Documented in
		IMR/SDC/BC/SOP-1 (RP) /
		Agilent 1260 HPLC with
		Fluorescence Detector
Serum / Plasma	Homocysteine (Total)	Reverse-phase Chromatography
		as Documented in
		IMR/SDC/BC/SOP-4 / Agilent
		1260 HPLC with Fluorescence
		Detector
	Carnitine (Total & Free)	Enzymatic end-point as
		documented in
		IMR/SDC/BC/SOP-3/
		Spectrophotometer
	Glycosaminoglycans (GAG)	Complex with Dimethylmethylene
	Quantitation	Blue (DMB) as documented in
		IMR/SDC/BC/SOP-5/
		Spectrophotometer

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GAG Separation	High Resolution Electrophoresis as documented in IMR/SDC/BC/SOP-6/ Multiphor II Electrophor
Organic Acids	Derivatisation with BSTFA as documented in IMR/SDC/BC/S
Orotic Acids	Reverse-phase Chromatography as Documented in IMR/SDC/BC/SOP-10/ Agilent 1200 HPLC with Diode Array Detector

SCOPE OF MEDICAL TESTING : CHEMICAL PATHOLOGY (SPECIALISED DIAGNOSTICS CENTRE / BIOCHEMISTRY UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Dried Blood Spot	Total galactose	Enzymatic End Point as documented in IMR/SDC/BC/SOP-13(1) / Tecan F200 Spectrofluorometer
	GALT	Enzymatic End Point as documented in IMR/SDC/BC/SOP-13(2) / Tecan F200 Spectrofluorometer
Plasma/serum /csf / Urine	Free Amino Acids	Ion Exchange Chromatography as Documented in IMR/SDC/BC/SOP-1 (IE) / Biochrom 30 Reverse-phase Chromatography as Documented in IMR/SDC/BC/SOP-1 (RP) / Agilent 1260 HPLC with Fluorescence Detector
Serum / Plasma	Homocysteine (Total)	Reverse-phase Chromatography as Documented in IMR/SDC/BC/SOP-4 / Agilent 1260 HPLC with Fluorescence Detector
	Carnitine (Total & Free)	Enzymatic end-point as documented in IMR/SDC/BC/SOP-3/ Spectrophotometer
	Glycosaminoglycans (GAG) Quantitation	Complex with Dimethylmethylene Blue (DMB) as documented in IMR/SDC/BC/SOP-5/ Spectrophotometer

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GAG Separation	High Resolution Electrophoresis
	as documented in
	IMR/SDC/BC/SOP-6/ Multiphor II
	Electrophor
Organic Acids	Derivatisation with BSTFA as
	documented in IMR/SDC/BC/S
Orotic Acids	Reverse-phase Chromatography
	as Documented in
	IMR/SDC/BC/SOP-10/ Agilent
	1200 HPLC with Diode Array
	Detector

SCOPE OF MEDICAL TESTING : MOLECULAR TESTING (SPECIALISED DIAGNOSTICS CENTRE / MOLECULAR DIAGNOSTICS UNIT)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Blood	Fragile X Syndrome (FRAXA)	CGG Repeats Analysis For
		Fragile-X Syndrome
		(FMR1/FRAXA Gene) as
		documented in
		IMR/SDC/UMD/SOP-14
	Prader Willi Syndrome	Methylation-specific –MLPA as
		documented in
		IMR/SDC/UMD/SOP-20
	Angelman Syndrome	Methylation-specific –MLPA as
		documented in
		IMR/SDC/UMD/SOP-20
	Spinal Muscular Atrophy	Gene Dosage by MLPA as
		documented in
		IMR/SDC/UMD/SOP-19
	Mitochondrial Diseases (MELAS,	PCR and Sanger Sequencing as
	MERRF, NARP, Leigh Syndrome,	documented in
	LHON)	IMR/SDC/UMD/SOP-1 and
		IMR/SDC/UMD/SOP-17
	DNA Sequencing (Sanger)	PCR and Sanger Sequencing as
		documented in
		IMR/SDC/UMD/SOP-1 and
		IMR/SDC/UMD/SOP-17
	Spinocerebellar Ataxia (Type	Fragment Analysis as
	1,2,3,6 and 7)	documented in
		IMR/SDC/UMD/SOP29
	POLG-related Disorders	PCR and Sanger Sequencing as
		documented in
		IMR/SDC/UMD/SOP-1 and
		IMR/SDC/UMD/SOP-17

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