



**Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya
(A UNIT OF MEDICAL RESEARCH FOUNDATION)**

2023



**SRI NATHELLA SAMPATHU CHETTY CLINICAL LABORATORY,
SANKARA NETHRALAYA (A UNIT OF MEDICAL RESEARCH FOUNDATION)**

MOLECULAR DIAGNOSTICS LABORATORY

**Venugopal block (VG block) Ground Floor
(Opposite to Main Laboratory)**

No: 41, College Road, Nungambakkam, Chennai- 600 006

Phone: 044- 42271500 Extn no: 1153, 1154

Direct Land Line number: 044-4221987

E-mail: microbiology@snmail.org, drdhanu@snmail.org

LABORATORY TIMINGS:

Monday to Saturday: 8.30 am – 5.30 pm

Contact Person: [Dr. L. Dhanurekha](mailto:Dr.L.Dhanurekha) (9551101660)

Authorized Signings Authorities:

Dr.L.Dhanurekha Ph.D, Senior Scientist,

Dr.AR.Anand Ph.D, In-Charge-Microbiology and Serology



MOLECULAR DIAGNOSTICS LABORATORY TEST MASTER LIST

S. No	Test Code	Name of Test	Sample to be collected	Volume Criteria	Turnaround time*	Temperature of Storage	Schedule of reporting	Lab tariff in Rs.
1.	461	Real-time PCR for CMV	EDTA blood, Urine, AC Tap, CSF, BAL, Amniotic fluid, Vitreous aspirate, Nasopharyngeal aspirate	2-3 ml	96 hrs. **	2-8°C	Friday	8000
2.	422	Real-time PCR for HSV (Qualitative)	EDTA blood, Urine, AC Tap, CSF, BAL, Amniotic fluid, Vitreous aspirate, Nasopharyngeal aspirate, endocervical swab/ scraping, Urethral swab, vesicular fluid/lesion scraping, corneal scraping	2-3 ml	24- 48hrs	2-8°C	Tuesday, Friday	4500
3.	420	PCR for <i>Mycobacterium tuberculosis</i> (M. tb)	EDTA blood	2-3 ml	24- 48hrs	2-8°C		
			Ocular specimens, non-ocular specimens and biopsy other than blood	----	24- 48hrs	2-8°C	Daily	4500



**Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya
(A UNIT OF MEDICAL RESEARCH FOUNDATION)**

2023

4.	421	PCR for Cytomegalovirus (CMV)	EDTA blood, Urine, AC Tap, CSF, BAL, Amniotic fluid, Vitreous aspirate, Nasopharyngeal aspirate	2-3 ml	24- 48hrs	2-8°C	Daily	3500
5.	423	PCR for Varicella Zoster Virus (VZV)	EDTA blood/ CSF and ocular specimens	2-3 ml	24- 48hrs	2-8°C	Daily	3500
6.	424	PCR for Adenovirus	EDTA blood, conjunctival swab, Throat swab, Nasopharyngeal aspirate, stool, urine	2-3 ml	24- 48hrs	2-8°C	Daily	4000
7.	425	PCR for <i>Chlamydia trachomatis</i>	EDTA blood, Conjunctival swab/ scraping, Pharyngeal aspirate, Endocervical swab, Urethral swab	2-3 ml	24- 48hrs	2-8°C	Daily	3500
8.	426	PCR for Eubacterial genome	Ac tap, Vitreous aspirate EDTA blood Any ocular & extra ocular specimens Biopsy from various organs	0.05-0.1ml 0.05-0.3ml 2-3ml	24- 48hrs	2-8°C	Daily	3500
9.	427	PCR for Pan fungal genome	Ac tap, Vitreous aspirate EDTA blood Any ocular & extra ocular specimens Biopsy from various organs	0.05-0.1ml 0.05-0.3ml 2-3 ml	24- 48hrs	2-8°C	Daily	3500



**Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya
(A UNIT OF MEDICAL RESEARCH FOUNDATION)**

2023

10.	428	PCR for <i>Propionibacterium acnes</i> (current name- <i>Cutibacterium acnes</i>)	Ac tap/ Vitreous aspirate EDTA blood Any ocular & extra ocular specimens Biopsy from various organs	0.05-0.1ml 0.05-0.3ml 2-3ml -----	24- 48hrs	2-8°C	Daily	3500
11.	429	PCR for <i>Toxoplasma gondii</i>	EDTA blood/ Ac tap / Vitreous aspirate/ CSF Amniotic fluid Subretinal abscess	2-3 ml 0.05-0.1ml 0.05-0.3ml/ 0.5-1ml	24- 48hrs	2-8°C	Daily	3500
12.	491	PCR for Non-Tuberculous Mycobacteria targeting hsp65 gene	Any clinical Specimen	---	24- 48hrs	2-8°C	Daily	3500
13.	275	PCR for Acanthamoeba Sps	Corneal scraping, Vitreous aspirate, AC Tap	--- 0.05-0.3ml 0.05-0.1ml	24- 48hrs	2-8°C	Daily	3500
14.	492	DNA sequencing for Amplified products	PCR amplified products	---	Within 96 hours	2-8°C	4 working days	4000



**Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya
(A UNIT OF MEDICAL RESEARCH FOUNDATION)**

2023


15.	498	PCR for sequencing for MYD88 L265 Mutation	AC Tap, Vitreous aspirate Sub retinal biopsy	0.05-0.1ml 0.05-0.3ml ----	Within 96 hours	2-8°C	4 working days	7500
16.	497	Product for DNA sequencing loading	PCR product	-----	Within 96 hours	2-8°C	4 working days	500
17.	462	Quantitative real time PCR for HSV	EDTA blood, Urine, AC Tap, CSF, BAL, Amniotic fluid, Vitreous aspirate, Nasopharyngeal aspirate, endocervical swab/ scraping, Urethral swab, vesicular fluid/lesion scraping, corneal scraping	2-3 ml	24- 48hrs	2-8°C	Daily	7000
18.	452	RT - PCR for <i>Rubella Virus</i>	Blood Lens aspirate Amniotic fluid	2-3 ml	24- 48hrs	2-8°C	Daily	6000
19.	273	Real Time PCR for Toxoplasma gondii	Any clinical specimen	-----	24- 48hrs	2-8°C	Daily	6000
20.	453	PCR for HLA B27 [^]	EDTA blood	2- 3 ml	24- 48hrs	2-8°C	Tuesday, Thursday & Saturday	3500
21.	459	Real-time PCR for HIV-1	EDTA blood or plain blood	2-3ml	24- 48hrs	2-8°C	Daily	9000



**Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya
(A UNIT OF MEDICAL RESEARCH FOUNDATION)**

2023

22.	460	Real time PCR for Chikungunya virus	Blood Ocular specimens	2-3 ml	24- 48hrs	2-8°C	Daily	5000
23.	463	Real-time PCR for <i>M.tuberculosis</i>	EDTA blood/ Ac tap/ Vitreous aspirate Any clinical specimen	2-3 ml / 100-200ul	24- 48hrs	2-8°C	Wednesday	8500
24.	464	Real-time PCR for Hepatitis B Virus	EDTA blood	2-3 ml	24- 48hrs	2-8°C	Daily	9000
25.	465	Real time PCR for Hepatitis C virus	EDTA blood	2-3 ml	24- 48hrs	2-8°C	Daily	9000
26.	467	PCR based DNA Sequencing	Any unidentifiable bacterial/ fungal isolate for the identification of species level	----	24- 48hrs	2-8°C	4 working days	7000
27.	474	PCR for <i>Salmonella typhi</i>	EDTA blood	2-3ml	24- 48hrs	2-8°C	Daily	3500
28.	486	PCR for <i>Pneumocystis jirovecii</i>	Broncho alveolar lavage / Respiratory secretions Ocular & extra ocular specimens	2-3 ml	24- 48hrs	2-8°C	Daily	4000
29.	489	Real-time PCR for Dengue Virus	Blood	2-3 ml	24- 48hrs	2-8°C	Daily	5000

	Sri Nathella Sampathu Chetty Clinical Laboratory, Sankara Nethralaya (A UNIT OF MEDICAL RESEARCH FOUNDATION)	2023
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30.	496	Real-time PCR for Varicella Zoster Virus	Any clinical specimen	-----	24- 48hrs	2-8°C	Daily	6000
31.	499	PCR for Pythium insidiosum	Any clinical specimen	-----	24- 48hrs	2-8°C	Daily	3500

****Batch test done in SNRL:**

- REAL TIME CMV (Friday). Samples received till 12.00 noon on the day of testing will be included on the same day. Samples received after 12.00 noon will be tested on the next scheduled day.

GENERAL PROTOCOL FOR SAMPLE COLLECTION

A. Sterile containers:

Bacteriology and Mycology Investigations (culture and PCR)

- Sterile swabs: Pus, infected wounds, throat, nose, vaginal secretions or other site.
- Sterile wide-mouthed containers for C.S.F, body fluid such as ascitic, pleural, synovial fluids and urine.
- Sterile containers, with screw cap and wide mouth for pus, urine, sputum, feces scrapings from any site & biopsies.
- For blood culture - Automated: BACTEC blood culture system bottles.
- For Anaerobic culture: Specimen inoculated immediately into Robertson Cooked Meat (RCM) media
- Blood samples- EDTA blood for PCR investigations

Viral investigation (PCR)-

- specimen in a sterile viral transport media



B. Transportation of clinical specimens:

The collected specimens can be transported to the laboratory in following temperatures and time period given below:

Test request	Transportation Temperature	Stipulated time period
Bacteriology		
Direct smears	Room temperature	24-48 hours
Bacterial and Fungal culture	4-8°C (except for CSF – room temperature)	24- 48 hours
Serology	4-8°C	24-48 hours
Molecular testing		
DNA analysis	room temperature 2-8°C	Within 24 hours Within 72 hours
RNA analysis	-70°C or lower/dry ice	Within 24 hours

C. Specific instruction on transportation of clinical specimens:

(i) Package of clinical specimens after collection to the Molecular Diagnostics Laboratory:

a. Primary Package:

The clinical samples should be in a sealed container, eg. sealed Vacutainer™ / specimen container.

b.Secondary Package:

If the sample is liquid, then the sealed primary container should be placed inside a sealed leak proof secondary package such as a sealed plastic bag or another watertight container sufficient to contain all of the liquid content if the primary container breaks. One bag per patient is advisable. Request form must be separately kept in a compartment/pouch and not put together with the sample pouch.

c.Tertiary Package:

A rigid sealed/secured outer container e.g. a cardboard box or plastic container, to house the secondary package.

d. Special Requirement for Frozen Samples:

For temperature sensitive samples the secondary container may also be a polystyrene box containing wet/dry ice. The box should be sealed with tape. The polystyrene box then placed inside a tertiary package with labeling.



In the final package box to be dispatched, laboratory address should be clearly labeled and transported.

(ii) Procedure for mailing of samples with details as below

- a. Name of the patient
- b. Age of the patient
- c. The type of material (specimen with site specification)
- d. Proper container- sterile, leak proof
- e. Date and time of collection
- f. Doctor's name
- g. Adequate clinical summary and clinical diagnosis with antibiotic history if relevant.

All the three containers should have a bio-hazard label stuck on the outside of the containers.

The specimen should be mailed to:

Molecular Diagnostics Laboratory

SankaraNethralaya,

No: 41, Old no: 18, College Road,

Nungambakkam, Chennai- 600 006

Phone: 044- 42271500 Extn no: 1153, 1154

Direct Land Line number: 044-4221987

E-mail: microbiology@snmail.org, drdhanu@snmail.org

D. Samples received for other Laboratory investigations:

If the clinical sample is common for either Microbiological or histopathological investigations, apart from Molecular testing, an aliquot of the sample will be submitted to the respective laboratories along with the test request form after obtaining approval/acceptance from the respective technical team.

Note: If the specimens are sent for both microbiological as well as for histopathological investigation, the specimen would be received in unfixed condition without formalin for microbiological examination.



D. ACCEPTANCE / REJECTION CRITERIA FOR RECEIVING SPECIMEN

S. No	Acceptance Criteria	Rejection Criteria
1.	Properly labeled specimens. 1. Full patient name, age, sex 2. Patient identification number. 3. Date and time of collection	Improperly labeled specimens: 1. Specimens not labeled 2. Specimens labeled with the incorrect patient identification 3. Specimens, that do not match the patient information on the laboratory requisition.
2.	Correct Specimen Collection 1. All clinical specimen collected in sterile container 2. Specimens collected with proper preservative or anticoagulant. 3. Correct volume 4. Collected specimen without any hemolysis or particulate matter 5. Specimen without any contamination 6. Specimen sent in normal saline, without formalin 7. Specimens collected from proper venipuncture site	Improper Collection: 1. Specimen for culture received in unsterile containers/ non-laboratory containers as evidenced by contamination of containers. 2. Specimens collected with the improper preservative or anticoagulant 3. Quantity of specimens insufficient to perform testing 4. Specimens which are hemolyzed, or contain particulate matter. 5. Specimens which are obviously or subsequently prove to be contaminated. 6. Samples sent in formalin 7. Specimens collected from intravenous tubing and specimens collected in heparin tubes for PCR. 8. Formalin fixed paraffin embedded block/sections for PCR
3.	Appropriate transportation 1. Specimen sent within the time limit prescribed by the laboratory. 2. Specimen transportation with appropriate packing. 3. Transportation of Specimens in 3 tier packing system. 4. Clinical specimen transported in appropriate transport medium for tests requested	Delay in Transportation to the laboratory: 1. Specimens not in compliance with universal precaution, (e.g. Not Bagged) 2. Specimens leaking or grossly contaminated on the exterior portion of container. Note: Irretrievable specimens, such as Cerebrospinal fluid (CSF), operating room specimen, biopsy specimens will not be discarded. 3. Samples which are not sufficient/ single swab submitted for multiple requests (for e.g. direct smear study and culture for aerobic and anaerobic bacteria, fungus and <i>Mycobacterium tuberculosis</i> / isolation of viruses etc)



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2023

4.	Samples collected before initiation of antibiotic therapy for bacterial isolation.	Samples collected after initiation of Antibiotic therapy for bacterial isolation.
5.	Mid-stream urine samples for culture collected with aseptic precautions and transported within one hour to laboratory.	Urine specimens left at room temperature for more than one hour.
6.	Sputum sample abiding with the Barlett's grading system	Sputum sample not abiding with the Barlett's grading system

01.06.2023