



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

2022



**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



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MOLECULAR MICROBIOLOGY (POLYMERASE CHAIN REACTION-QUALITATIVE PCR)

Test code	Tests	Lab Tariff In Rs.	Specimen	TAT	Method of testing
420	PCR for <i>Mycobacterium tuberculosis</i> (MPB64 and IS6110 gene)	2800	Any clinical specimen	24-48hrs	PCR
421	PCR for Cytomegalovirus (CMV)	2800	Blood, urine, Amniotic fluid, Ocular specimens, Nasopharyngeal aspirate	24-48hrs	PCR
422	Real time PCR for Herpes Simplex Virus (HSV)	2800	endocervical swab/scraping, urethral swab, vesicular fluid/lesion scraping, ocular samples	24-48hrs	PCR
423	PCR for Varicella Zoster Virus (VZV)	2800	Vesicular fluid and CSF, ocular samples	24-48hrs	PCR
424	PCR for Adenovirus	2800	Conjunctival swab, throat swab, nasopharyngeal aspirate, stool, urine	24-48hrs	PCR
425	PCR for <i>Chlamydia trachomatis</i>	2800	Conjunctival swab/scraping, pharyngeal aspirate, endo cervical swab, urethral swab	24-48hrs	PCR
493	GENE XPERT	2020	Pulmonary and Extra pulmonary specimens except blood	6-8 hrs	Automated
467	DNA Sequencing	4610	Any clinical specimen/Isolate	Within 96hrs	PCR based DNA Sequencing
492	DNA Sequencing for Amplified products	1810	PCR amplified products	Within 96hrs	Sequencing
497	Product for DNA Sequencing loading	240	PCR product	Within 96hrs	Sequencing



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426	PCR for Eubacterial genome	2800	Blood/Any ocular specimens, tissue /biopsy from various organs.	24-48 hrs	PCR
427	PCR for Pan fungal genome	2800	Blood/Any ocular specimens, tissue /biopsy from various organs.	24-48 hrs	PCR
428	PCR for <i>Cutibacterium acnes</i> (formerly <i>Propionibacterium acnes</i>)	2800	Any ocular specimens, Tissue /biopsy from various organs.	24-48hrs	PCR
429	PCR for <i>Toxoplasma gondii</i>	2800	CSF, Amniotic fluid, Aqueous chamber tap, vitreous aspirate, subretinal abscess	24-48hrs	PCR
451	PCR for <i>Chlamydia pneumoniae</i>	2600	Blood, naso-pharyngeal aspirate, CSF, Aqueous chamber tap, vitreous fluid	24-48hrs	PCR
473	PCR for <i>Leptospira interrogans</i>	2800	Blood/ ocular samples	24-48hrs	PCR
474	PCR for <i>Salmonella typhi</i>	2800	Blood	24-48hrs	PCR
487	RT (Reverse transcriptase)-PCR for <i>Mycobacterium tuberculosis</i> targeting <i>85B</i> gene	3590	Any clinical specimen	24-48hrs	Reverse Transcriptase PCR
491	PCR for Mycobacterial species targeting <i>hsp 65</i> gene	2800	Any clinical specimen	24-48hrs	PCR
489	Real time PCR For Genotyping (1-4) of Dengue Virus	4320	Blood	24-48hrs	PCR
469	PCR For Epstein Barr Virus (VCA AND <i>EBNA1</i> gene)	2370	Any clinical specimen	24-48hrs	PCR
275	PCR for <i>Acanthamoeba</i> <i>sps</i>	2800	Corneal scraping (OD/ OS) Vitreous aspirate (OD/OS), Aqueous aspirate (OD/OS)	24-48hrs	PCR
498	PCR for sequencing for MYD88 L265P mutation	4620	Vitreous aspirate, Aqueous aspirate	Within 96 hrs	PCR



REAL TIME PCR TESTS (QUANTITATIVE)

Test code	Tests	Lab Tariff in Rs.	Specimen	TAT	Method of testing
459	Real Time Reverse transcriptase PCR for Human Immunodeficiency Virus-1 (HIV-1)	5380	Blood	24-48hrs	Real time PCR
460	Real Time PCR for Chikungunya Virus	6430	Blood/ocular samples	24-48hrs	Real time PCR
461	Real Time PCR for Cytomeglo virus (CMV)	5380	Any clinical Specimen	24- 96hrs	Real time PCR
462	Real Time PCR for Herpes Simplex Virus (HSV)	5380	Any clinical specimen	24-48hrs	Real time PCR
463	Real Time PCR for <i>Mycobacterium tuberculosis (M.tb)</i>	6430	Any clinical specimen	24-48hrs	Real time PCR
464	Real Time PCR for Hepatitis B virus	5970	Blood	24-48hrs	Real time PCR
465	Real Time Reverse transcriptase PCR for Hepatitis C virus	5970	Blood	24-48hrs	Real time PCR
470	Real Time PCR for Epstein Barr virus (EBV)	4560	Any clinical specimen	24-48hrs	Real time PCR
486	Real Time PCR for <i>Pneumocystis jirovecii</i>	2600	Any clinical specimen	24-48hrs	Real time PCR
483	Real time PCR for BK virus	5020	Blood	24- 96hrs	Real time PCR
496	Real Time PCR for Varicella Zoster Virus (VZV)	5380	Any clinical specimen	24-48hrs	Real time PCR
452	Real Time Reverse transcriptase - PCR for Rubella Virus	3660	Lens aspirate, amniotic fluid, Blood	24-48hrs	Reverse Transcriptase PCR
273	Real Time PCR for <i>Toxoplasma gondii</i>	4200	Any clinical specimen	24-48hrs	Real time PCR



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	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.



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	<p>6. Specimen sent in normal saline, without formalin 7. Specimens collected from proper venipuncture site</p>	<p>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</p>
3.	<p>Appropriate transportation</p> <ol style="list-style-type: none"> 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 	<p>Delay in Transportation to the laboratory:</p> <ol style="list-style-type: none"> 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)
4.	<p>Samples collected before initiation of antibiotic therapy for bacterial isolation.</p>	<p>Samples collected after initiation of Antibiotic therapy for bacterial isolation.</p>
5.	<p>Mid-stream urine samples for culture collected with aseptic precautions and transported within one hour to laboratory.</p>	<p>Urine specimens left at room temperature for more than one hour.</p>
6.	<p>Sputum sample abiding with the Barlett's grading system</p>	<p>Sputum sample not abiding with the Barlett's grading system</p>

29.10.22