

Test Definition: LCMAL

Malaria, Molecular Detection, PCR, Varies

Reporting Title: Malaria PCR **Performing Location:** Rochester

Ordering Guidance:

- 1. This test is **not** performed on a STAT basis and, therefore, should **not** be used as a primary screening test for malaria.
- 2. This test is used primarily for confirmation of a presumptive malaria diagnosis and determination of infecting *Plasmodium* species-particularly when the parasite morphology on traditional blood films is suboptimal.
- 3. Clients in the Rochester, MN area who are seeking a primary test for malaria and who can deliver the specimen within 4 hours of collection should order MAL / Rapid Malaria/Babesia Smear, Varies.
- 4. Laboratories that are unable to deliver a specimen within 4 hours of collection should perform an initial screen for malaria and other blood parasites in their laboratory prior to sending a specimen to Mayo Clinic Laboratories.
- 5. This test does **not** include blood smear examination/calculation of parasitemia. If calculation of percent parasitemia is also desired for cases that are positive for *Plasmodium* species, clients should order LMALP / Malaria PCR with Parasitemia Reflex, Varies.

Specimen Requirements:

Both blood specimens and slides are required.

Specimen Type: Blood

Container/Tube: Lavender top (EDTA)

Specimen Volume: 4 mL Collection Instructions:

1. Invert several times to mix blood.

2. Send specimen in original tube. Do not aliquot.

Specimen Type: Blood films

Container/Tube: Clean, grease-free slides in plastic slide container Specimen Volume: 2 thin blood films and 2 thick blood films

Collection Instructions:

- 1. Ideally, blood films should be made directly from uncoagulated blood acquired via fingerstick. However, EDTA anticoagulated blood is also acceptable.
- 2. Prepare thin blood films as follows:
- a. Prepare a thin film with a "feathered edge" that is no more than a single cell thick.
- b. Allow the film to thoroughly air dry and then fix by briefly immersing in either absolute or 95% methyl alcohol.
- c. Allow to air dry after fixation.
- 3. Prepare thick blood films as follows:
- a. Place a large drop of blood (approximately the size of a dime and preferably from a fingerstick) on a slide.
- b. Using a corner of a second slide, spread the drop in a circular motion while applying firm pressure to literally scratch the blood onto the carrier slide. This technique allows the blood to dry quickly and adhere well to the slide. Use approximately 20 circular sweeps with the second slide. The drop of blood should be about the size of a quarter when finished.
- c. **Do not fix.** Air dry thoroughly (approximately 45 minutes) before placing in transport container.

Forms:

If not ordering electronically, complete, print, and send a Microbiology Test Request (T244) with the specimen.



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Specimen Type	Temperature	Time	Special Container
Varies	Refrigerated (preferred)	7 days	
	Ambient	7 days	

Result Codes:

Result ID	Reporting Name	Туре	Unit	LOINC®
87860	Malaria PCR	Alphanumeric		47260-5

 $\ensuremath{\mathsf{LOINC}}\xspace^{\ensuremath{\texttt{@}}}$ and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

87798

Reference Values:

Negative