

 Tarangnan Community Hospital Clinical Laboratory • Serology Section	Document No.: WI-S-003-A-V0	CONTROLLED COPY Do not copy or remove
	Parent document: SOP-S-003, Sections 5.3–5.6 Version: V0	
Applies to: Medical Technologists and Laboratory Aides Effective date: MM-DD-YYYY Supersedes: None		

Syphilis Rapid Treponemal Cassette & RPR Flocculation Card Bench Aid

Sequential Testing Algorithm • Ambient Temperature Control (23–29 °C) • RPR Titration • SPH Referral

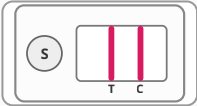
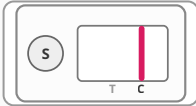
BIOSAFETY: Wear gloves; discard droppers/cassettes into biohazard/sharps waste; decontaminate spills per waste SOP.

PART A: RAPID TREPONEMAL ANTIBODY LATERAL-FLOW CASSETTE

1	Specimen & Buffer Loading: Equilibrate cassette and serum to 15–30 °C. Dispense exactly 10 µL (or 1 drop) of serum into sample well (S). Immediately add 2 to 3 drops (80–100 µL) assay buffer. Start timer. SOP 5.3.2	10 µL + buffer
2	Result Reading & Maximum Limit: Read visually at 15 to 20 minutes . STOP Do NOT read after 20 minutes. If non-reactive but early primary syphilis is clinically suspected, order RPR (and consider repeat treponemal testing). If reactive, proceed immediately to RPR card testing. SOP 5.3.3–4	15–20 min

PART B: RAPID PLASMA REAGIN (RPR) 18 MM FLOCCULATION CARD & SERIAL TITRATION

3	Temperature & Serum Spreading: Verify bench temperature is 23 °C to 29 °C (73–85 °F) . Dispense exactly 50 µL unheated serum into an 18 mm circle of RPR card. Spread evenly to fill circle without crossing line. SOP 5.2.3 / 5.4.2	23–29 °C Log
4	Carbon Antigen Addition: Invert antigen bottle gently. Hold bottle strictly vertical and dispense exactly 1 free-falling drop (17 µL) of carbon antigen into center of serum pool (needle calibrated 60 ± 2 drops/mL). Do NOT restir. SOP 5.4.2	1 drop (17 µL)
5	Mechanical Rotation & Reading: Place card on rotator, cover with humidifying cover, and rotate for exactly 8 minutes at 100 rpm . Remove immediately, tilt card 3–4 times by hand, and read macroscopically under high-intensity light. SOP 5.4.2	8 min @ 100 rpm
6	Quantitative Titration & Prozone Check: For every reactive/weakly reactive qualitative RPR, perform 2-fold serial dilutions (1:1, 1:2, 1:4, 1:8, 1:16, 1:32) in 0.9% saline. If neat serum looks rough/grainy, suspect prozone; test 1:4 and 1:16. SOP 5.4.4–5	Serial Titer

TREP REACTIVE  Both C & T lines. Run RPR card.	TREP NON-REACTIVE  C line only. Report Non-Reactive.	RPR REACTIVE (R)  Large/medium carbon clumps. Perform serial dilution titer.	RPR WEAK (W)  Fine dispersed carbon flakes. Titrate for endpoint.	RPR NONREACTIVE  Uniform Grey Smooth uniform grey suspension, no visible clumps.
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ENVIRONMENTAL & QC GOVERNANCE (SOP 5.2 / 5.5) Temperature Limit: Strictly 23 °C to 29 °C. <23 °C causes false negatives; >29 °C causes evaporation false positives. Daily RPR Controls: Test Reactive, Weakly Reactive, and Nonreactive control sera daily with every batch. Needle Calibration: Verify weekly: 1.0 mL distilled water = 60 ± 2 free-falling drops.	CONFIRMATORY REFERRAL PROTOCOL (SOP 5.6.2) Referral Trigger: Any reactive treponemal cassette or reactive RPR card. Referral Facility: Samar Provincial Hospital (SPH) or NRL for TP-PA / FTA-ABS. Specimen Aliquot: Minimum 1.0 mL clear serum at 2 to 8 °C in triple packaging. Statutory Notification: Report reactive cases under RA 11332; notify clinician immediately.
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Prepared by: Chief Medical Technologist Signature / Date: _____	Reviewed by: Pathologist Signature / Date: _____	Approved by: Hospital Director Signature / Date: _____
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