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Section: Technical Manual	Subject Title: Acid fast stain for Nocardia (Modified Kinyoun)	
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ACID FAST STAIN FOR NOCARDIA (MODIFIED KINYOUN)

Principle

Nocardia species possess the unique characteristic of resisting decolorization with acid alcohol.

Reagents

1. Carbol-fuchsin

Basic fuchsin solution	(3 g basic fuchsin in 100 mL 95% ethyl alcohol)
	10 mL
Phenol 5% aqueous	90 mL

2. Decolourizer (1% sulfuric acid)

H ₂ SO ₄ (concentrated)	1 mL
Distilled water	99 mL

3. Methylene blue

Methylene blue	0.3 g
Distilled water	100 mL

Staining Procedure

1. Fix the smear by gentle heating.
2. Flood the smear with Carbol fuchsin solution.
3. Allow the slide to stand for 5 minutes.
4. Wash the smear with tap water.
5. Decolorize the smear with 1% sulfuric acid until no more colour appears in the washing (approx. 1 min.).
6. Rinse with tap water.
7. Counterstain with methylene blue about 1 minute.
8. Rinse with tap water and air dry.

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Interpretation

The filaments of *Nocardia* species and *Rhodococcus* appear red-stained against a blue background.

Quality Control

A positive control slide of *Nocardia* species is stained simultaneously with the clinical specimens.

References

1. Murray, PA. et al. Manual of Clinical Microbiology, 7th edition, 1999 ASM, Washington, D.C.