

Ziehl neelsen acid fast stain

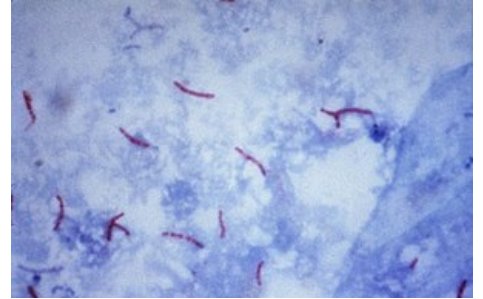
Ziehl-Neelsen Acid Fast Stain

Acid-fast staining is intended for acid-resistant bacteria of the genus *Mycobacterium* and *Nocardia*. According to Gram, these microorganisms do not stain due to a cell wall that contains lipids with mycolic acids. These lipids do not absorb dyes poorly and must therefore be dyed hot (dyes so absorbed cannot be washed off even by decolorization with solvents containing strong acids (acid resistance) or bases).

Acid-resistant bacteria are colored pink to red with carbolfuchsin. The contrasting background is green or blue.

Ziehl-Neelsen staining procedure:

1. **Carbolfuchsin** is applied to the fixed preparation and heated with a torch (hot dyeing).
 2. Subsequently, we decolorize the specimen with **acid alcohol** while tilting the slide.
 3. Rinse the specimen in running water.
 4. Then stain the slide with **malachite** green (or methylene blue) for 30 seconds.
 5. Rinse the specimen in running water.
 6. Leave to dry
- 1.



Mycobacterium tuberculosis podle Ziehl-Neelsena.

Links

Related Articles

- Methods of Staining Bacteria, Micromycetes and Parasites
- *Mycobacterium tuberculosis*
- *Mycobacterium leprae*
- *Mycobacterium avium*