

Spore Staining is a laboratory technique used to identify bacterial endospores. Notably, the pathogenic genera *Bacillus* and *Clostridium* are among them spore forming. Endospores are highly resistant structures produced by certain bacteria, allowing them to survive harsh environmental conditions such as extreme heat, desiccation, and chemical exposure. Spore staining is essential for clinical microbiologists analyzing patient samples, as only a few genera are capable of forming spores. Unlike vegetative cells, spores have impermeable coats that resist staining.