ACE Biolabs
Technical support: order@acebiolab.com
Phone: 886-3-2870051

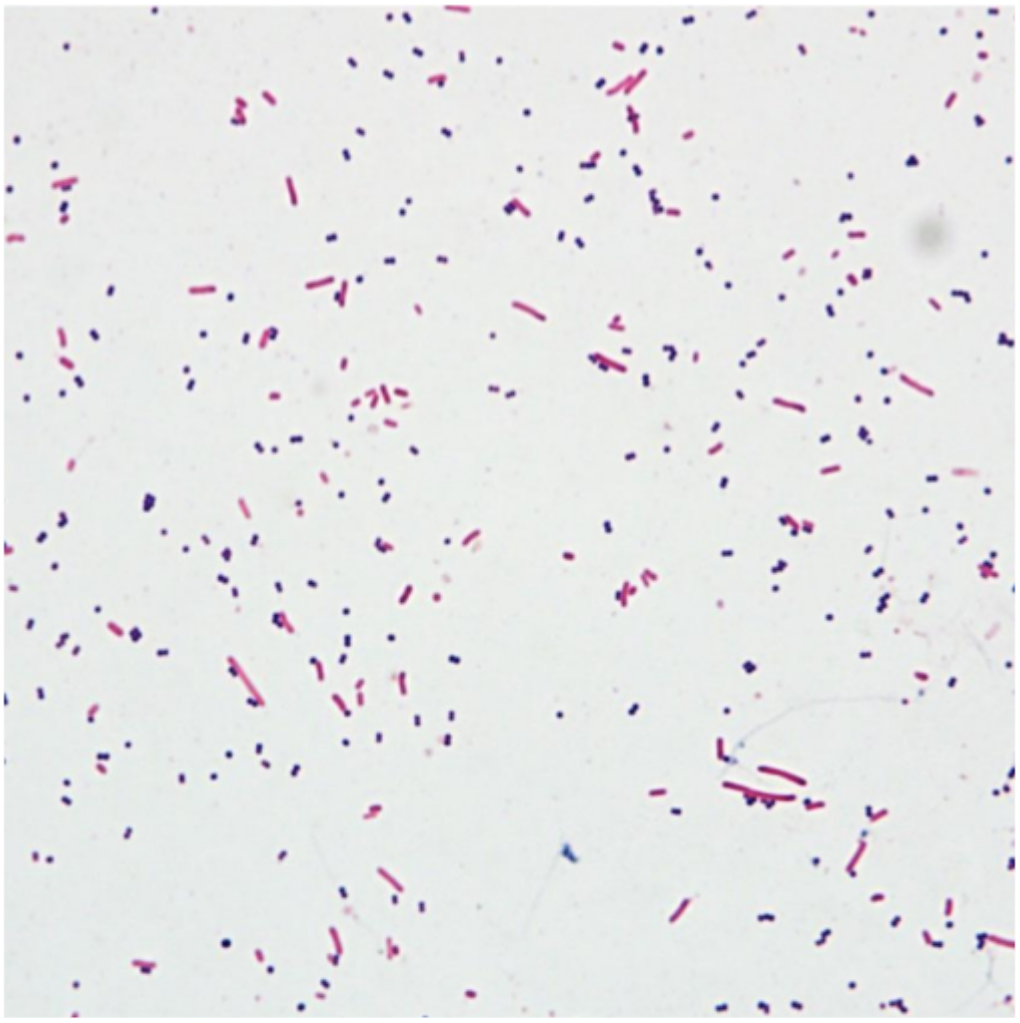
Gram Staining Kit

Cat# C6001
store at at 2-8 °C

INFORMATION

Size	4x250ml, 4x500ml, 4x1000ml
Introduction	The Gram Stain is a different staining technique most widely applied in microbiology. Gram staining is based on the ability of bacteria cell wall to retaining the crystal violet dye during solvent treatment. The cell walls for Gram-positive microorganisms have a higher peptidoglycan and lower lipid content than gramnegative bacteria Bacteria cell walls are stained by the Gram's Crystal Violet Solution. Iodine is subsequently added as a mordant to form the crystal violet-iodine complex so that the dye cannot be removed easily. However, subsequent treatment with Gram's Decolorizing Solution dissolves the lipid layer from the gram-negative cells. As a result, the diffusion of the violet-iodine complex is blocked, and the bacteria remain stained. The length of the decolorization is critical in differentiating the gram-positive bacteria from the gram-negative bacteria. Finally, counterstain with Gram's Safranin Solution, the gram-negative bacteria is stained a pink color.
Kit Components	1.Crystal Violet Solution,Main ingredient: crystal violet 2.Iodine Solution,Main ingredients: iodine: potassium iodide 3.Decolorizer,Main ingredients: isopropanol, acetone 4.Fuchsin Solution,Main ingredients: fuchsin
Protocol	Prepare a thin smear on clear, dry glass slide. Allow to air dry and fix it over a gentle flame, while moving the slide in a circular fashion to avoid localized overheating. 1) Flood with Gram's Crystal Violet Solution for 10 seconds. Wash with tap water. 2) Flood the smear with Gram's Iodine Solution for 10 seconds. Wash with tap water. 3) Decolorize with Gram's Decolorizing Solution for 5 to 10 s until the blue dye no longer flows. 4) Wash with tap water.Counterstain with Fuchsin Safranin Solution for 10 seconds.Wash with tap water. 5) Allow the slide to air dry or blot dry between sheets of clean bibulous paper and view under oil immersion lens.
Storage instruction	2-8 °C, avoid light, valid for 1 year.
Result	Gram-Positive Organisms: Bluish Purple Gram-Negative Organisms: Pinkish Red
Note	1. The specimen smear should not be too thick and should be carried out in strict accordance with the operation requirements. If the smear is thick, the decolorization time should be extended until purple no longer appears. 2.The temperature of slide on flame should not be too high.If the iodine solution becomes colorless, change it

	3.If there is no oil microscope observation condition or the slices need to be preserved for a long time, the neutral resin seal can be added after drying and observed under 40 times microscope. 4.When washing, the action should be gentle, and the washing bottle should be used along the diagonal d⌋rection of the slide to avoid washing off the bacteria.



PRODUCT USE LIMITATION