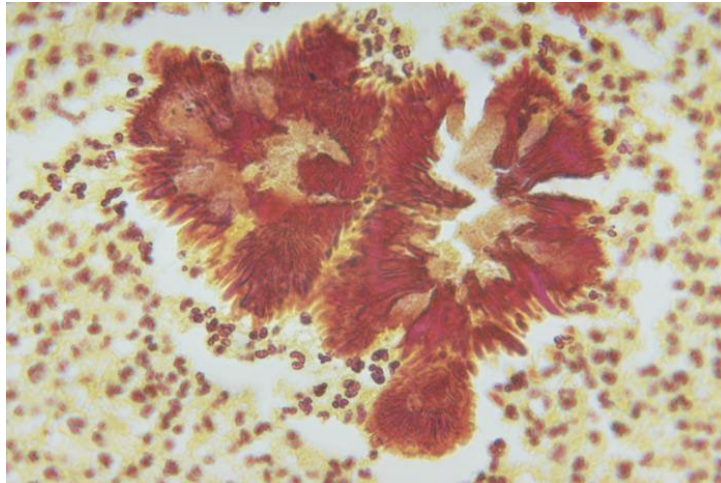




BROWN - BRENN



Gram-negative bacteria

CODE	DESCRIPTION	TESTS NUMBER
04-100807	Brown Brenn	100 test

IVD

In Vitro Diagnostic – medical device
EMDN: W01030799
IVD in **Class A**, Reg. UE 2017/746
UDI-DI: 08033976231095
Basic UDI: 080339762W01030799Y5



Manufacturer: Bio-Optica Milano S.p.A.

Product for the preparation of cyto-histological samples for optical microscopy.
For demonstration Gram-positive and Gram-negative bacteria in tissue sections and smears.

PRINCIPLE

Gram staining is the most important method to differentiate bacteria species. Two dyes are used one after the other: crystal violet and fuchsin. Crystal violet solution precipitates through oxidation with a iodine solution. The deriving complex attaches to bacteria cell walls with bonds of varying nature and intensity. The differentiating solution removes the crystal violet-iodine complex from the walls of some bacteria, but it does not act on others. These retain the primary dye and are called Gram-positive. Decolorized bacteria are then counterstained with a red dye; they are called Gram-negative. Gram-positive bacteria's capacity to retain the dye-iodine complex is usually ascribed to the bond which develops between the complex and a molecule only Gram-positive possess, namely magnesium ribonucleate.

METHOD

- 1) Bring section to distilled water.
- 2) Put on the section 8 drops of reagent A and 2 drops of reagent B: leave to act 1 minute.
- 3) Wash in distilled water.
- 4) Put on the section 10 drops of reagent C: leave to act 3 minutes.
- 5) Rinse in water and blot with filter paper to complete dryness.
- 6) Put on the section 10 drops of reagent D: leave to act 1 minute,
- 7) Drain the slide without washing.
- 8) Put on the section 10 drops of reagent E: leave to act 1 minute.
- 9) Rinse in water and blot with filter paper.
- 10) Put on the section 10 drops of reagent F: leave to act 1 minute.
- 11) Drain the slide without washing.
- 12) Put on the section 10 drops of reagent G: leave to act 30 seconds.
- 13) Clear in xylene and mount.



The picture is for illustrative purposes only

Technical details

Method specifications	Procedure time	8 minutes		
	Complementary equipment	Not requested		
	Results	Gram-positive bacteria:	Blue-violet	
		Gram-negative bacteria:	Pink-Red	
		Filaments of Nocardia and Actinomyces:	Blue	
		Nuclei:	Red	
Other tissue elements:		Yellow		
Components	A) Crystal violet solution	30 ml		
	B) Sodium bicarbonate solution	30 ml		
	C) Gram's iodine solution	50 ml		
	D) Ethanol - Acetone	30 ml		
	E) Basic Fuchsin solution	30 ml		
	F) Picric acid solution	30 ml		
	G) Acetone - Limonene solution	100 ml		
Storage	Storage	Store the preparation at room temperature. Keep the containers tightly closed.		
	Storage temperature	15-25°C		
	Stability	After the first opening, the product is reusable until the expiry date, if correctly stored.		
	Validity	2 years		
Warning	Product classification	<p>The product is intended for professional laboratory use for healthcare professionals. Carefully read the information on the label (danger symbols, risk and safety phrases) and always consult the safety data sheet. Do not use if the primary container is damaged. In the event of a serious accident, we recommended that you immediately inform Bio-Optica Milano S.p.A and the competent authorities.</p>		
	Disposal	Hazardous preparation: observe all state and local environmental regulations regarding waste disposal.		

REVISION n°	REASON	REVISION DATE
001	Regulation adjustment UE 2017/746 - IVDR	16/05/2022