

Modified Giolitti-Cantoni Broth Base

Product No.	Product Category	Specification
HCM185	Dehydrated Culture Medium	500g/bottle

Intended Use

Giolitti-Cantoni Broth Base is used detection of coagulase-positive staphylococci in food and animal feeding stuffs by MPN technique. (ISO)

Principle and Interpretation

Enzymatic digest of casein, meat extract and yeast extract provide nitrogen source, a carbon source and growth factors. Mannitol serves as a fermentable carbon source. Sodium chloride maintains the osmotic pressure. Lithium chloride and glycine inhibit Gram-positive bacteria. Tellurite inhibits Gram-negative bacilli. Sodium pyruvate promotes the growth of staphylococcus. Tween 80 is used to promote cellular recovery of damaged *Staphylococcus aureus*.

Formula

Ingredients	/liter
Enzymatic digest of casein	10.0g
Meat extract	5.0g
Yeast extract	5.0g
Lithium chloride	5.0g
Mannitol	20.0g
Sodium chloride	5.0g
Glycine	1.2g
Sodium pyruvate	3.0g
Tween 80	1.0g
pH 6.9±0.2 at 25°C	

Preparation

Single Strength: Suspend 55.2g in 1 L purified water. Heat with frequent agitation and boil to completely dissolve the powder. Dispense 9 mL into each tube. Autoclave at 121°C for 15 minutes. Then cool to room temperature. Add 0.1mL of 1% Potassium Tellurite (029380) per tube.

Double Strength: Suspend 110.4g in 1 L purified water. Heat with frequent agitation and boil to completely dissolve the powder. Dispense 10 mL into each tube. Autoclave at 121°C for 15 minutes. Then cool to room temperature. Add 0.2mL of 1% Potassium Tellurite (029380) per tube.

GUANGDONG HUANKAI MICROBIAL SCI.&TECH.CO.,LTD.

Address: No. 788 Shenzhou Road, Science City, Huangpu District, Guangzhou, Guangdong, China

Email: support@hkmbio.com

Website: <https://www.huankaigroup.com>

Technical Data Sheet



Quality Control

Cultural characteristics after 24-48h hours at $35 \pm 2^{\circ}\text{C}$.

Quality control strains	Growth
<i>Staphylococcus aureus</i> ATCC25923	Good, broth turbid
<i>Staphylococcus aureus</i> ATCC6538	
<i>Escherichia coli</i> ATCC8739	Inhibited, broth clear

Storage and Shelf Life

Keep container tightly closed, store in a cool, dry place, away from bright light.

Use before expiry date on the label.

Precautions

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort
2. Keep container tightly closed after using to prevent clumping.

Waste Disposal

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

Revision

Mar. 1, 2025

References

ISO 6883-3-2003 Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species)—Part 3: Detection and MPN technique for low number

GUANGDONG HUANKAI MICROBIAL SCI.&TECH.CO.,LTD.

Address: No. 788 Shenzhou Road, Science City, Huangpu District, Guangzhou, Guangdong, China

Email: support@hkmbio.com

Website: <https://www.huankaigroup.com>