

## TM 562 - KING'S OF MEDIUM BASE

### INTENDED USE

For studying oxidation fermentation of carbohydrates by *Campylobacter* species.

### PRODUCT SUMMARY AND EXPLANATION

*Campylobacter* is a motile gram-negative bacterium that causes Campylobacteriosis when it gets lodged in the walls of intestine. They are usually carried in the intestinal tract of animals and therefore contaminate foods of animal origin. Although raw milk is a frequently reported vehicle of outbreaks of *Campylobacter enteritis*, studies have revealed that mishandled poultry is more important than raw milk in transmitting *Campylobacter jejuni* enteritis. The utilization pattern for several carbohydrates (e.g. lactose, maltose, xylose, sucrose etc.) is often needed to help identify an organism genus and species. Kings OF Medium is formulated as recommended by APHA for studying the oxidation-fermentation reaction of carbohydrates by *Campylobacter* species.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	0.200
Phenol red	0.003
Agar	0.300

### PRINCIPLE

Kings OF Medium contains tryptone, which supplies nitrogenous compounds required for the growth of *Campylobacter* species. Phenol red is the pH indicator. Oxidation of carbohydrate is indicated by a yellow colour formation. The medium will be yellow (acid) when removed from the microaerobic atmosphere due to CO<sub>2</sub> absorption. To read OF reactions, let the tubes stand at room temperature until the OF control becomes neutral or alkaline, usually within 2 hours.

### INSTRUCTION FOR USE

- Dissolve 0.5 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 40-50°C and aseptically add filter sterilized solution of desired carbohydrate to get a final concentration of 1% and dispense in sterile tubes.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Light yellow to beige homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Light pink coloured, clear to slightly opalescent gel forms in tubes as butts.
<b>pH (at 25°C)</b>	: 7.4±0.2

### INTERPRETATION

Cultural characteristics observed with added Dextrose under reduced oxygen atmosphere, after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid (with dextrose)	Incubation Temperature	Incubation Period



<i>Campylobacter jejuni</i> subsp. <i>jejuni</i>	29428	50-100	Good	Positive reaction, yellow colour	42°C	24-48 Hours
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**PACKAGING:**

In pack size of 100 gm and 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

1. Deming M. S., Jauxe R. V., Blake P. A., Dixas S. E., Fowler B. S., Jones T. S., Lockamy E. A., Patten C. A. and Sikes R. O., 1987, Am. J. Epidemiol., 126: 526
2. Gill C. O., and Harris L. M., 1982, Appl. Environ. Microbiol., 44:259
3. Harris N.V., Weiss N. S., and Nolan C. M., 1986, Am. J. Publ. Health, 76:40
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedMet GmbH Borkstrasse 10, 48163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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