



**CAMPYLOBACTER AGAR BASE**

**TM 056**

**INTENDED USE**

For selective isolation of *Campylobacter* species from faecal samples, foods and environment

**COMPOSITION**

<b>Ingredients</b>	<b>Gms/Ltr</b>
Proteose peptone	15.000
Agar	12.000
Sodium chloride	5.000
Yeast extract	5.000
Liver digest	2.500

**PRODUCT SUMMARY AND EXPLANATION**

Campylobacter Agar Base is used for selective isolation and cultivation of Brucella or *Campylobacter* species. *Campylobacter* species are ubiquitous in the environment inhabiting a wide variety of ecological niches. Infection with a *Campylobacter* species is one of the most common causes of human bacterial gastroenteritis. Most species are found in animals (cattle, swine) and cause infertility and abortion. The bacterium's main reservoir is poultry; humans can contract the disease from eating food contaminated with *Campylobacter* species. Another source of infection is contact with infected animals, which often carry *Campylobacter* asymptotically.

Campylobacter isolation relies, in addition, on a medium's selectivity, which depends on the antimicrobial agents in the medium, a microaerophilic environment and the incubation temperature of 42°C, which suppresses the growth of most normal bacteria.

Campylobacter Agar Base is recommended by APHA for selective isolation of *Campylobacter* species.

**PRINCIPLE**

Proteose peptone, Yeast extracts and Liver digest provides essential carbon and nitrogen sources for the growth of bacterial metabolism. Sodium chloride maintains the osmotic equilibrium. Agar is the solidifying agent.

Campylobacter Agar Base is well supplemented to support luxuriant growth of *Campylobacter* species. Blood serves as an additional source of nutrients including X-factor. The antibiotic supplements namely Blaser-Wang (TS 007) and Skirrow (TS 009) markedly reduce the growth of normal enteric bacteria while enhancing the growth and recovery of *C. jejuni* from faecal specimens. Amphotericin B in Blaser-



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Wang (TS 007) supplement greatly or completely inhibits growth of fungi. *C. jejuni* colonies appear non-haemolytic, flat and gray with an irregular edge or raised and round with a mucoid appearance. Some strains may appear tan or slightly pink. Swarming may be observed on moist surfaces.

### INSTRUCTIONS FOR USE

1. Dissolve 19.75gms in 500ml of distilled water.
2. Gently heat to boiling with gentle swirling and dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool to 45-50°C and aseptically add 5 -7% sterile lysed horse blood or 10% sheep blood and also 1 vial rehydrated contents of Campylobacter Selective Supplement I (Blaser - Wang) (TS 007) or Campylobacter Supplements III (Skirrow) (TS 009).
5. Mix gently and dispense into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

**Appearance Dehydrated powder:** Cream to yellow colour, homogeneous free flowing powder

**Appearance of the prepared medium:**

**Basal medium:** Yellow coloured clear gel

**After addition of 5-7% v/v lysed blood:** Reddish brown colour, opaque gel

**pH (at 25°C):** 7.4 ± 0.2

### CULTURE RESPONSE

Cultural characteristics observed under reduced oxygen atmosphere after incubation at 37 ±2 °C for 24-48 hours.

Organism	ATCC	Growth w/ added Campylobacter supplement I, Blaser-Wang (TS 007)	Growth w/ added Campylobacter supplement III, Skirrow (TS 009)
<i>Candida albicans</i>	10231	None - Poor	Moderate
<i>Campylobacter jejuni</i>	29428	Good - Luxuriant	Good-Luxuriant
<i>Escherichia coli</i>	25922	None - Poor	None - Poor
<i>Enterococcus faecalis</i>	29212	None - Poor	None - Poor

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**Authorized Representative:** MedNet GmbH, Borkstrasse 10, 48163 Munster, Germany.



## **STORAGE & STABILITY**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

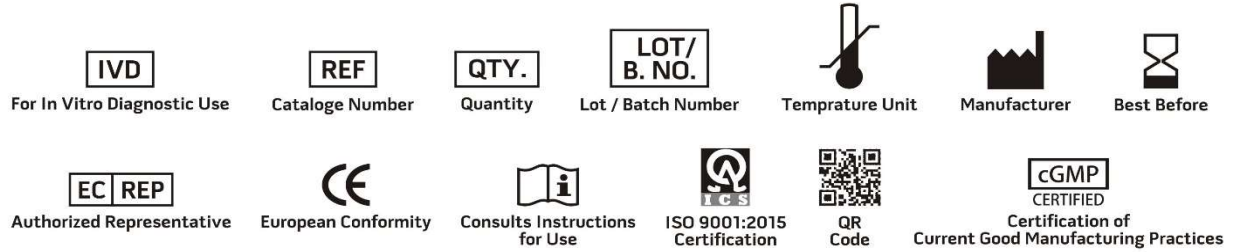
## **REFERENCES**

1. Koneman E. W, Allen S. D., Janda W. M, Schreckenberger P. C., Winn W. C. Jr, 1992, Colour Atlas and Textbook of Clinical Microbiology, 4th Edition, J. B. Lippincott Company.
2. Dekeyser P., Hossuin-Detrain M, Butzler J. P. Sterron J., 1972, J. Infect. Dis., 125: 390
3. Skirrow M. D., 1977, Br. Med. J. 2:9
4. Blaser M. J., Cravens B. W., Powers and Wang W. L., 1978, Lanect (ii) : 979
5. Wilson and Wang, 1979, Information flier, Campylobacter Laboratory, Veterans Administration Hospital, Denver. Co.
6. Vanderzant C., and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of foods, 3rd Ed., APHA, Washington, D.C.
7. Manning H., Duim B., Wassenaar T., Wagenaar A., Ridley A., Newell D.G., 2001, Appl. Environ. Microbiol., 67:1185
8. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
9. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington, D.C.
10. Isenberg, H.D. Clinical . Microbiology Procedures Handb0ook. 2nd Edition.
11. 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.
12. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



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## PRODUCT DATA SHEET



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