CAMPY CEFEX AGAR

INTENDED USE
Remel Campy Cefex Agar is a solid medium recommended for use in qualitative procedures for selective and differential isolation of *Campylobacter* species from food and poultry.

SUMMARY AND EXPLANATION
Campylobacter is recognized as a major cause of acute diarrheal disease in humans. Consumption of contaminated food and water accounts for 70% of *Campylobacter*-related illnesses each year, with poultry identified as a primary reservoir.[1] In 1992, Stern developed Campy Cefex Agar for the isolation of *Campylobacter* from poultry.[2] Oyarzabal et al. reported Campy Cefex Agar demonstrated the best results of the six agars tested for recovery of *Campylobacter* spp. from poultry carcass rinses.[3] In 2007, Campy Cefex Agar was recommended by the National Advisory Committee on Microbiological Criteria for Foods (NACMCF) for isolation of *Campylobacter* spp. from poultry.[4] Campy Cefex Agar is also recommended by the American Public Health Association (APHA) and United States Department of Agriculture (USDA) for the isolation of *Campylobacter* spp. from foods and poultry.[5,6]

PRINCIPLE
Casein and meat peptones supply nitrogenous substances, carbon, and sulfur required for the growth of *Campylobacter* spp. Sodium chloride is a source of essential electrolytes and maintains osmotic equilibrium. Yeast extract provides B-complex vitamins. Dextrose is a ready source of energy. Ferrous sulfate, sodium pyruvate, and sodium bisulfite enhance the aerotolerance of *Campylobacter* and facilitate its growth. Cefoperazone is a selective agent which inhibits commensal microbial fecal flora and cycloheximide inhibits the growth of fungi. Laked horse blood provides hemin and other essential growth factors. Agar is a solidifying agent.

REAGENTS (CLASSICAL FORMULA)*

Casein Peptone	10.0	g	Sodium Pyruvate	0.5	g
Meat Peptone	10.0	g	Sodium Bisulfite	0.3	g
Sodium Chloride	5.0	g	Cycloheximide	0.2	g
Yeast Extract	2.0	g	Cefoperazone	33.0	mg
Dextrose	1.0	g	Laked Horse Blood	5	%
Ferrous Sulfate	0.5	g	Agar	15.0	g
			Demineralized Water	1000.0	ml

pH 7.0 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PRECAUTIONS
This product is For Laboratory Use only. It is not intended for use in the diagnosis of disease or other conditions.

PROCEDURE
Consult current editions of appropriate references for the recommended procedure for sample preparation, inoculation, testing, and interpretation.[4,5,6]

QUALITY CONTROL
Each lot number of Campy Cefex Agar has been manufactured, packaged, and processed in accordance with current Good Manufacturing Practice regulations. All lot numbers have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

CONTROL	INCUBATION	RESULTS
Campylobacter jejuni ATCC® 33291	Microaerophilc, up to 72 h @ 40-42°C	Growth
Cryptococcus neoformans ATCC® 34877	Ambient, up to 72 h @ 25-30°C	No growth
Pseudomonas aeruginosa ATCC® 27853	Ambient, 18-24 h @ 33-37°C	No growth

LIMITATIONS
1. Cephalothin-sensitive *Campylobacter* spp. may not be recovered on Campy Cefex Agar because it contains cefoperazone.
2. Colonies isolated on Campy Cefex Agar require additional biochemical testing for definitive identification as *Campylobacter* spp.

BIBLIOGRAPHY

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6. Downes, F.P. and K. Ito. 2001. Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA, Washington, D.C.

Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, sample collection, storage and transportation, materials required, quality control, and limitations.

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