

KARMALI AGAR BASE ISO 10272

CAT N°: 1460

Selective medium for the isolation of *Campylobacter jejuni* and *Campylobacter coli* when incubation is at 42°C

FORMULA IN g/l

Columbia Agar	42.00	Hematin	0.032
Bacteriological Charcoal	4.00		

Final pH 7.4 ± 0.2 at 25°C

PREPARATION

Suspend 23 grams of medium in 500 ml. of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C and aseptically add one vial of the Karmali Supplement (Cat 6055) previously reconstituted in 5 ml of sterile distilled water. Homogenize gently and dispense into sterile containers. The prepared medium should be stored at 8-15°C. The color of the prepared medium is black.

The dehydrated medium should be homogeneous, free-flowing and black in color. If there are any physical changes, discard the medium.

KARMALI SUPPLEMENT (Cat. 6055)

(Composition: each vial for 500 ml)

Sodium Pyruvate.....	50 mg
Vancomycin.....	10 mg
Cycloheximide.....	50 mg
Cephaloperazone.....	16 mg

USES

KARMALI AGAR BASE is a medium based in the formula described by Karmali and it is recommended for the isolation of *Campylobacter jejuni* and *Campylobacter coli*.

Pancreatic digest of casein, Meat peptic digest and Heart pancreatic digest provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group essential for bacterial growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Activated Charcoal and corn starch decomposes and neutralizes hydrogen peroxide and other toxic metabolites. Bacteriological agar is the solidifying agent.

Sodium pyruvate is a source of energy for bacterial metabolism and aids in resuscitation of stressed organisms. Vancomycin, Cycloheximide and Cephaloperazone act as inhibition substances.

With an incubation of 42°C the selectivity increases and the growth is faster. Non thermophilic strains don't grow as for example *Campylobacter fetus subs fetus*.

Inoculate and incubate at 42-48°C during 42 hours.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium, with the Karmali Supplement added (Cat 6055), after incubation at a temperature of 42-48°C and observed after 42 hours.

Microorganisms	Growth
<i>Campylobacter jejuni</i> ATCC 33291	Good
<i>Escherichia coli</i> ATCC 25922	Inhibited

BIBLIOGRAPHY

Karmali M.A., Simor A.E., Roscoe M., Fleming P.C, Smith S.S. and Lane J. (1986) *J.Clin.Micro.* 23. 456-459.
International Organisation for Standardization (ISO), Draft ISO/DIS 10272 (1995)

STORAGE

Once opened keep powdered medium closed to avoid hydration.

