

Alkaline Peptone Water

Cat. 1407

For the enrichment of *Vibrio* species from food, water and clinical samples

Practical information

| Applications | Categories |
|--------------|------------|
| Enrichment | Vibrio |



Principles and uses

Alkaline Peptone Water is used for the enrichment of *Vibrio cholera* and *Vibrio* species from food, water, feces and clinical studies.

This medium has been recommended by various authors to increase the recovery of *Vibrio* species in fecal materials and other samples.

Peptones provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance and encourages the growth of *Vibrio cholerae*.

It is claimed that raising the medium's pH leads the medium's alkalinity to inhibit most of the unwanted flora background, leaving the viability of the *Vibrio* species intact.

Growth in tubes is indicated by turbidity compared to an uninoculated control. Additional steps are recommended, like plating onto a selective and non-selective media for isolation and morphology, and biochemical and serological studies for identification.

Formula in g/L

| | | | |
|-----------------|----|------------------|----|
| Peptone | 10 | Proteose peptone | 10 |
| Sodium chloride | 5 | | |

Preparation

Suspend 25 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. To make a 10x-strength base suspend 250 grams instead of 25 grams. Dispense into appropriate containers and sterilize in autoclave at 121 °C for 15 minutes.

Instructions for use

For clinical diagnosis, the type of sample is feces.

- Inoculate the tubes with fecal samples.
- Incubate in aerobic conditions at 35±2 °C for 24 hours.
- Reading and interpretation of the results.

Quality control

| Solubility | Appearance | Color of the dehydrated medium | Color of the prepared medium | Final pH (25°C) |
|------------|-------------|--------------------------------|------------------------------|-----------------|
| w/o rests | Fine powder | Beige | Amber | 8,6±0,2 |

Microbiological test

Incubation conditions: (37±2 °C / 24 h).

Microrganisms

Vibrio cholerae EITOR ATCC 14033

Specification

Good growth

Storage

Temp. Min.:2 °C

Temp. Max.:25 °C

Bibliography

Colwell, R.R. 1996. Global climate and infectious disease: the cholera paradigm. Science 274. Kelly, M,T, F.W. Hickman-Bremer, and J.J. Framer III.