70179 Peptone Water
NutriSelect® Plus

A non-selective enrichment medium. Can be used for fermentation studies with various carbohydrates.

Composition:

Ingredients	Grams/Litre
Peptone	10.0
Sodium chloride	5.0

Final pH 7.2 +/- 0.2 at 25°C

Store granulated media below 30°C in tightly closed container and and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Appearance(color): Cream to yellow coloured, free flowing powder
Color and Clarity: Yellow coloured clear solution without any precipitate

Directions:
Add 15 g to 1 litre of distilled water. Mix well and distribute into final containers. Sterilize by autoclaving at 121°C for 15 minutes. If sterile solutions are to be added after autoclaving, reduce the volume of water for reconstitution by an equal amount.

Principle and Interpretation:
Peptone Water is used for cultivating nonfastidious organisms, for studying carbohydrate fermentation patterns and for performing the indole test. Peptone used in Peptone Water is rich in tryptophan content. Presence of indole can be demonstrated using either Kovacs or Ehlrich reagent. This media is also utilized as a base for carbohydrate fermentation studies with the addition of sugar and indicators such as bromocresol purple, phenol red or bromothymol blue.

Peptone Water is recommended (2,3,4) for studying the ability of an organism to ferment a specific carbohydrate which help in differentiation of genera and species. Peptone water is formulated as per Shread, Donovan and Lee (1).
Peptone Water contains peptone as a source of carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic equilibrium of the medium.

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hrs. Addition of 0.2 to 0.3ml of Kovac's Indole Reagent to each tube after incubation.

Organisms (ATCC/WDCM)	Inoculum (CFU)	Growth	Indole reaction
Escherichia coli (25922/-)	50-100	+++	positive reaction, red ring at the interface of the medium
Enterobacter aerogenes(13048/-)	50-100	+++	negative reaction, no color development/cloudy ring
Klebsiella pneumoniae(13883/-)	50-100	+++	negative reaction, no color development/cloudy ring

References:
1. Shread P., Donovan T.J, and Lee J.V, (1981), Soc. Gen, Microbiol. Q., 8, 184.
2. Finegold and Baron, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.
3. Lennette and others (Eds.), 1985, Manual of Clinical Microbiology, 4th ed, ASM, Washington, D.C.
4. MacFaddin J., 1980, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.-

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.