11577 Peptone Test kit with Plant Peptones

Application:
Many biotechnologists and microbiologists are confronted with the question of what is the best peptidesource for their fermentation process. This Kit helps one to find the best peptide source from plant origine for your organisms. There is a huge choice of peptones, extracts and hydrolysates for media. With a peptide source specific fitted to your microorganisms, you can increase the yield and improve the reproducibility of your results. That means you save money and time!

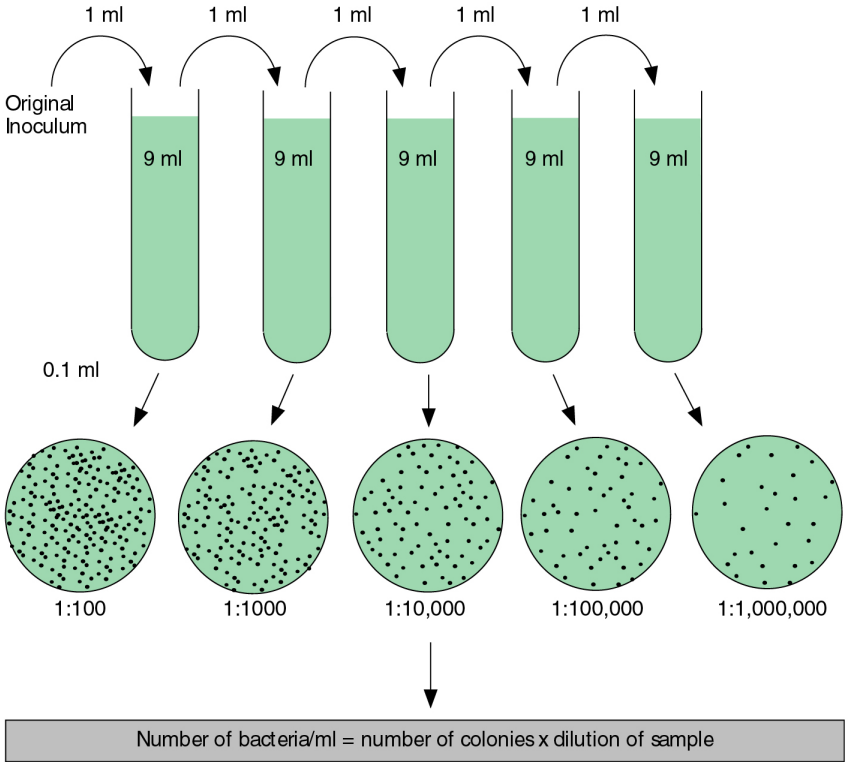
Product Description:

Cat. #	Name	Cat. #	Name
18332	Peptone (vegetable)	49869	Vegetable Extract no 2
51841	Peptone (vegetable) acid hydrolysate	07436	Vegetable hydrolysate no 2
19942	Peptone (vegetable), no 1	67381	Vegetable Infusion powder
61854	Peptone (vegetable), no 2	95757	Vegetable Special Infusion powder
92976	Peptone special (vegetable)	83059	Peptone from potatoes
29185	Proteose Peptone (vegetable)	93492	Peptone from wheat
16922	Tryptone (vegetable)	90765	Peptone from soybean, enzymatic digest (Replacement for 55273)
12331	Tryptose (vegetable)	70178	Peptone from soybean, enzymatic digest
05138	Vegetable Extract	S1674	Soy protein acid hydrolysate
04316	Vegetable Extract no 1	87972	Peptone from soybean, enzymatic digest

Quantity: 10 g of each peptide source

Proposed Methods:
For Agars: Prepare 100 ml of the wished medium with all the different peptide source. Use the common production and sterilizing procedure. Mix well before pouring into 4 to 5 plates. Inoculate the plates with the test strains using the serial dilution method. Incubate them for the usual time (about 24-48 hours) at the characteristic temperature. Measure the colony sizes and calculate the average colony size. May it is also interesting to compare the recovery rate (countig the number of growing colonies).

Serial Dilution Method:
The inoculum is diluted out in a series of dilution tubes which are plated out (see piture on the right).



For Broths: Prepare 100 ml of your wished medium with all the different peptide source. Use the common production and sterilizing procedure. Give the broth into a 250 ml Erlenmeyer flask. Inoculate the Erlenmeyer flask with a solution of the test strains. The absorbance (600 nm) of the inoculated broth should be lower than 0.1. Incubate the flask at the characteristic temperature and take samples for absorbance determinatinon. Take every hour a sample until the first absorbances are higher than 0.1 but lower than 1.0. Then compare the absorbances of all the different broths.

Principle and Interpretation:
The feature of a peptide source depends on the pH, solubility, elementary composition free amino acids and other issues. All these parameters are important to meet the growth requirement of the microorganisms. If you have the ideal peptide source the growth of the microorganisms is stronger than with an unsuited peptone or hydrolysate. That means for example the agar-plate with the highest recovery rate and biggest average colony size or the broth with the highest absorbance has the best growth condition.

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.

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