Pancreatin Solution

Pancreatin solution (P0212) contains 0.25 g of pancreatin per 50 mL of solution. This solution has been pH adjusted to be neutral (7.0 pH) by using 0.05 M sodium bicarbonate solution.

Pancreatin contains the enzyme trypsin, which IS normally found in the small intestine. Pancreatin is usually used to demonstrate that proteins are digested by trypsin. Hard boiled egg white is commonly used as the digestive substrate. Albumin or casein can also be used. Temperature can be controlled by placing the digestive chambers in an incubator at 37 °C (100 °F). Toluene is often added in a small quantity (several drops/test tube) to inhibit growth of microbes during incubation.

Pancreatin is ideal for a number of traditional enzyme activities:

- Optimum pH for enzyme activity: adjust pH levels of solution with sodium bicarbonate or boric acid and monitor the digestive rates of the substrate at varying pHs. Typical pH range would be pH 5 to 9.
- Temperature effects on enzyme activity can also be tested in an incubator while controlling other variables.
- Compare trypsin activity with other enzymes that can digest protein, such as papain, bromelin, meat tenderizers, or other enzyme sources.

Materials available from Flinn Scientific, Inc.

Catalog No.	Description
S0285	Sodium Bicarbonate Solution, 0.1 M
B0137	Boric Acid
C0043	Casein
A0258	Albumin
T0019	Toluene

Consult the Flinn Scientific website for current prices.

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