



Product Usage

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Product: **Bovine Insulin Powder Cat. No. 700-112P**
Bovine Insulin Powder γ -irradiated Cat. 700-912P

Description	Insulin is a polypeptide hormone produced in the pancreatic islets of Langerhans that has a molecular weight of ~5800 Da. Insulin primarily regulates the uptake and storage of glucose in cellular systems. It also plays a related role in the metabolism of certain amino and fatty acids. Bovine insulin is remarkably similar to human insulin, differing in molecular structure by only three amino acid residues.
Storage	Store powder at -20°C to -10°C protected from moisture. Solubilized insulin can be aliquoted into single use aliquots and stored at -20°C. Avoid multiple freeze thaw cycles. Alternatively, solubilized insulin can be filtered and stored 2-8°C for up to 12 months.
Solubility	For 2 mg/mL concentration stock solutions, dissolve 100mg vial of powder in 50mL water at pH 2.0-3.0 (add 0.1mL acetic acid or 0.1N HCl until pH is achieved and/or fully dissolved*). Sterile filter with 0.2um membrane and dispense into single-use aliquots.

**Stirring the solution with a stir bar at room temperature can take up to 45-60 minutes to completely dissolve. At higher concentrations, solution might have a cloudy appearance which clears after sterile filtration.*

Note: Bovine insulin is sometimes used as a cell culture medium supplement, with a concentration range of 1-10 ug/mL depending on the cell type. Avoid excessive freeze-thaw cycles.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!