



Product Usage

Product: **Bovine Insulin Powder Cat. No. 700-112P**
 Bovine Insulin Powder γ -irradiated Cat. No. 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 at -20°C for up to 6 months, or 2-8°C for up to 12 months in single-use aliquots.

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 0.2 μ m 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 μ g/mL depending on the cell type. Avoid excessive freeze-thaw cycles.

For *in vitro* diagnostic laboratory use or further manufacturing only. Not for human therapeutic use.

