

Native Bovine Insulin

Catalog No.	CRI116B	Quantity:	100 mg
	CRI116C		1 g

Description: Native Bovine Insulin

Insulin is purified from an ethanol/phosphoric acid extract of bovine pancreas by multiple ammonium sulfate and isoelectric precipitations. It is then crystallized without zinc followed by crystallization with zinc. The zinc content of the final product is approximately 0.5%. Zinc can be removed by solubilizing the insulin in dilute acetic acid, adding excess EDTA to chelate the zinc, and then precipitating the insulin at its isoelectric point.

Source: Bovine pancreas

Molecular Weight: 5.733 kDa

Formulation: Lyophilized

Elemental Analysis: Nitrogen: 14.5 - 16.0%
Zinc: ~0.5%

Loss on Drying: NMT 10%

HPLC Potency: ≥27 USP units/mg

Reconstitution: **Centrifuge vial prior to opening.** Insulin has low solubility at neutral pH. It can be solubilized at 2 mg/ml in dilute acetic acid or hydrochloric acid, pH 2-3. Insulin solutions cannot be autoclaved. Insulin can also be solubilized in 125 mM NaHCO₃. However, alkaline stock solutions are not recommended since high pH increases the rate of deamidation and aggregation.

Storage & Stability: Store desiccated at -20°C. Stock solutions should be stored frozen at -20°C in single use aliquots. Alternatively, it can be stored at 2-4°C for up to 1 year if it is sterile-filtered through a low protein binding membrane. **Avoid repeated freeze-thaw cycles. Protect from light.**

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