

# Human Insulin

## Instruction Manual

Product	Size	Catalog Number
Human Insulin (from yeast)	50 mg	C-52310

### Description

Insulin is a hormone consisting of a two-chain polypeptide and is produced by the beta-cells of pancreatic islets. It regulates cellular uptake, utilization, and storage of glucose, amino acids, and fatty acids and inhibits the breakdown of glycogen, protein and fat.

In serum-free medium insulin is an essential supplement for long-term growth of commonly used mammalian cell lines. PromoCell Human Insulin is a white to off-white powder recombinantly expressed in yeast.

### Physical / Chemical Data

Origin: Yeast  
 Purity: > 98%  
 Biological Activity:  $\geq 25$  IU/mg  
 Zinc Content:  $\leq 1\%$

### Solubility

10 mg/ml in 0.01 N HCl.

### Storage and Stability

Store at  $-20^{\circ}\text{C}$  in the dark immediately after arrival. If stored properly, the product is stable until the expiry date stated on the label.

### Quality Control

All lots of PromoCell Insulin are subjected to comprehensive quality control tests. Each lot is routinely tested for the use with human primary cells and parameters such as biological activity and endotoxin content. Approved in-house lots are used as a reference.

In addition, all lots have been tested for the absence of microbial contaminants (fungi, bacteria).

### Intended Use

The products are for *in vitro* research use only and not for diagnostic or therapeutic procedures. For safety precautions please see appropriate MSDS.