

Insulin & ITS Supplement

Enhance Your Media, Empower Your Cells

Modern bioprocessing demands flexibility, reproducibility, and consistent performance. Capricorn Scientific offers two trusted supplements to meet these needs:

- » **Insulin Solution** – for precise glucose uptake control and robust cell growth
- » **ITS Supplement (100x)** – a balanced combination of Insulin, Transferrin, and Selenium that supports serum-free or serum-reduced media formulations

Whether you are developing serum-free platforms, scaling up production, or fine-tuning metabolic profiles, our chemically defined additives integrate seamlessly into your protocols.

KEY BENEFITS OF INSULIN & ITS SUPPLEMENT



» **Optimized for a Wide Range of Cell Types**

Trusted in CHO, MDCK, Hybridoma, Vero, Stem cells, and many more – including suspension and adherent formats



» **Supports Growth, Viability, and Productivity**

Insulin promotes nutrient uptake; transferrin and selenium protect against oxidative stress and support cellular metabolism



» **Chemically Defined and Animal Component-Free**

Recombinant production in *Saccharomyces cerevisiae* ensures consistency and eliminates risks from undefined components



» **Flexible Use in Biotech Process**

Suitable for batch, fed-batch, and perfusion strategies in research and manufacturing settings

SPECIFICATIONS AT A GLANCE

SUPPLEMENT	COMPOSITION	USE CASE
INSULIN SOLUTION	Recombinant Insulin	Enhancing metabolism & protein expression
ITS SUPPLEMENT	Recombinant Insulin Recombinant Transferrin Sodium selenite	Physiological growth, iron delivery, redox balance under defined conditions

APPLICATIONS OF INSULIN AND ITS SUPPLEMENT

Capricorn Scientific's supplements support a wide range of applications in both basic research and biomanufacturing:

Chemically Defined and Reduced-Serum Cell Culture

Insulin enhances glucose uptake and metabolism, while transferrin and selenium support iron delivery and antioxidative pathways – maintaining cell growth even with reduced or no serum

Enhanced Proliferation in Diverse Cell Types

Proven to boost growth and viability in CHO, HEK293, VERO, Hybridoma, Stem cells, and primary cultures, especially under low-serum conditions

Stem Cell and Regenerative Medicine Workflows

ITS supports attachment, maintenance, and differentiation of pluripotent and multipotent stem cells

Serum Reduction in Translational and Clinical Research

Reduces dependence on animal-derived serum while maintaining essential signaling factors – ideal for cGMP-related or defined media systems

ORDER INFORMATION

PRODUCT

Insulin
Human Recombinant Solution (5 mg/ml)

VOL. CAT.NO.

5 ml INS-K

ITS Supplement (100x)

Insulin, Transferrin, Selenium

10 ml ITS-H



For further support, feel free to contact our experts at techservice@capricorn-scientific.com or phone (+49 6424 944 64 0).

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