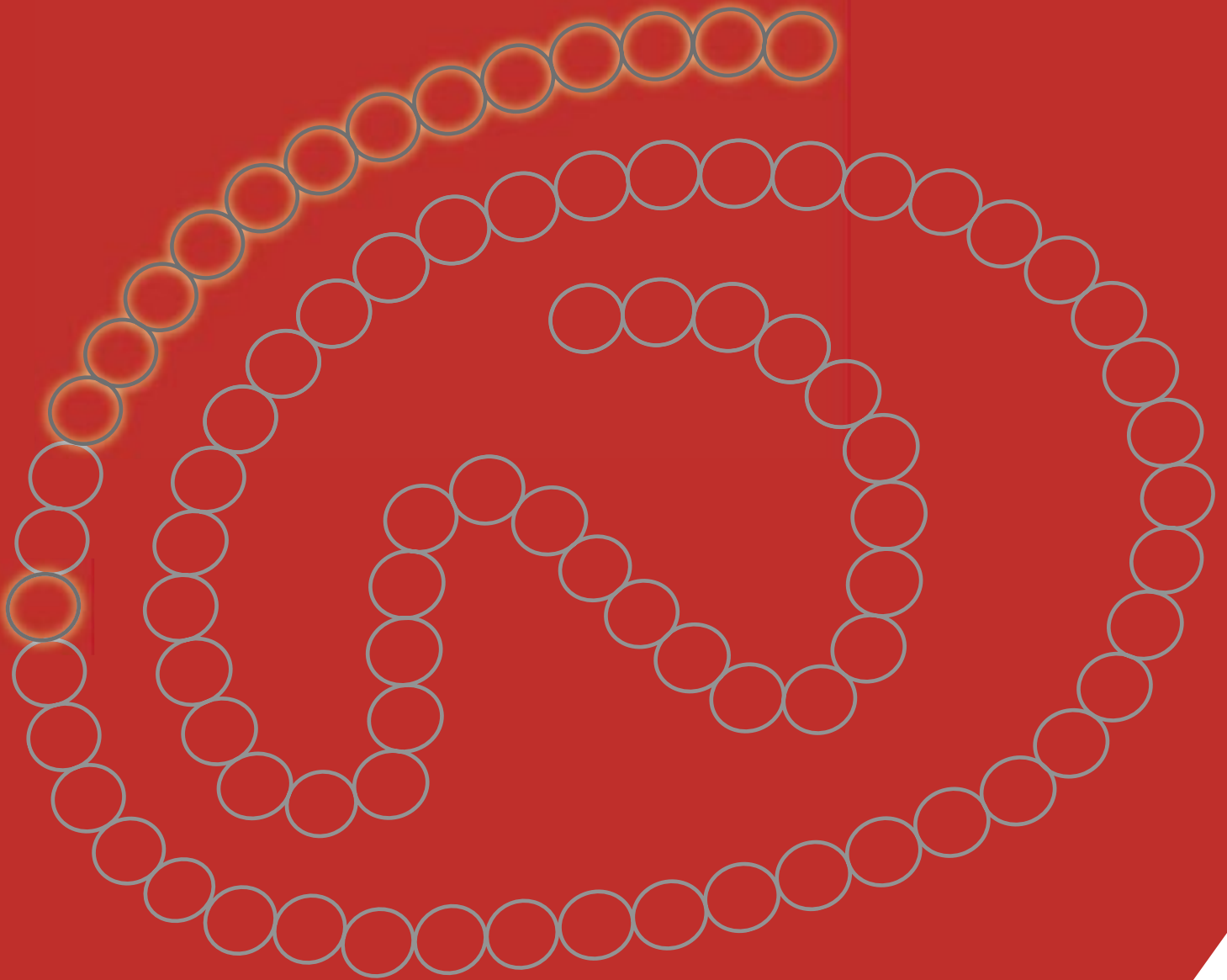


LONG™ R³IGF-I

Your Insulin Alternative



Q: Will your critical raw materials be there when you need them?

A: LONG™R³IGF-I will be. You have a consistent insulin alternative with LONG™R³IGF-I dedicated to industrial cell culture applications.

Responsive Expertise

SAFC Biosciences is the world's leading supplier of cell culture reagents to producers of marketed biological products. We are committed to supplying high-quality critical raw materials and specialized cell culture products to the global health care industry. By providing the broadest range of highly customized products and services possible to cell culture-based manufacturing companies we demonstrate our commitment to being responsive experts.

The Supply Chain Solution

Recombinant human insulin and other growth factors are essential for long-term growth and proliferation of cell lines. Recombinant human insulin is also in high demand as a therapeutic drug, which may lead to supply availability issues for industrial cell culture applications.

Your supply chain solution:

LONG™R³IGF-I, an effective, consistent alternative to insulin.

LONG™R³IGF-I is manufactured exclusively for cell culture applications. It is not subject to market fluctuations and shortages compared to recombinant insulin, which is used primarily to treat diabetic patients. There is, however, a continuous supply of LONG™R³IGF-I, ensuring that optimal cell culture performance and productivity are maintained and not interrupted.

Exclusively for Cell Culture

LONG™R³IGF-I is a recombinant growth factor analog of human insulin-like growth factor-I (IGF-I). LONG™R³IGF-I is specifically designed and manufactured for mammalian cell culture to support large-scale manufacturing of recombinant biopharmaceuticals. LONG™R³IGF-I is approved by the FDA/EMA in numerous marketed biopharmaceuticals.

When supplemented in serum-free cell cultures, LONG™R³IGF-I binds specifically to Type I IGF receptors (IGF-IR). LONG™R³IGF-I:

- Promotes cell proliferation
- Increases cell survival
- Activates anti-apoptotic signaling molecules
- Extends culture longevity
- Eases transition to serum-free media
- Increases recombinant protein production

LONG™R³IGF-I in serum-free media has been shown to be equivalent to or better than insulin in supporting cell





growth, viability and protein production. It has been used with numerous cell types, including CHO, BHK, HEK 293, Vero, PER.C6®, MDCK and fibroblasts. All cell types which express type I IGF receptors or are insulin-responsive have the potential to respond to LONG™R³IGF-I.

cGMP & ACF

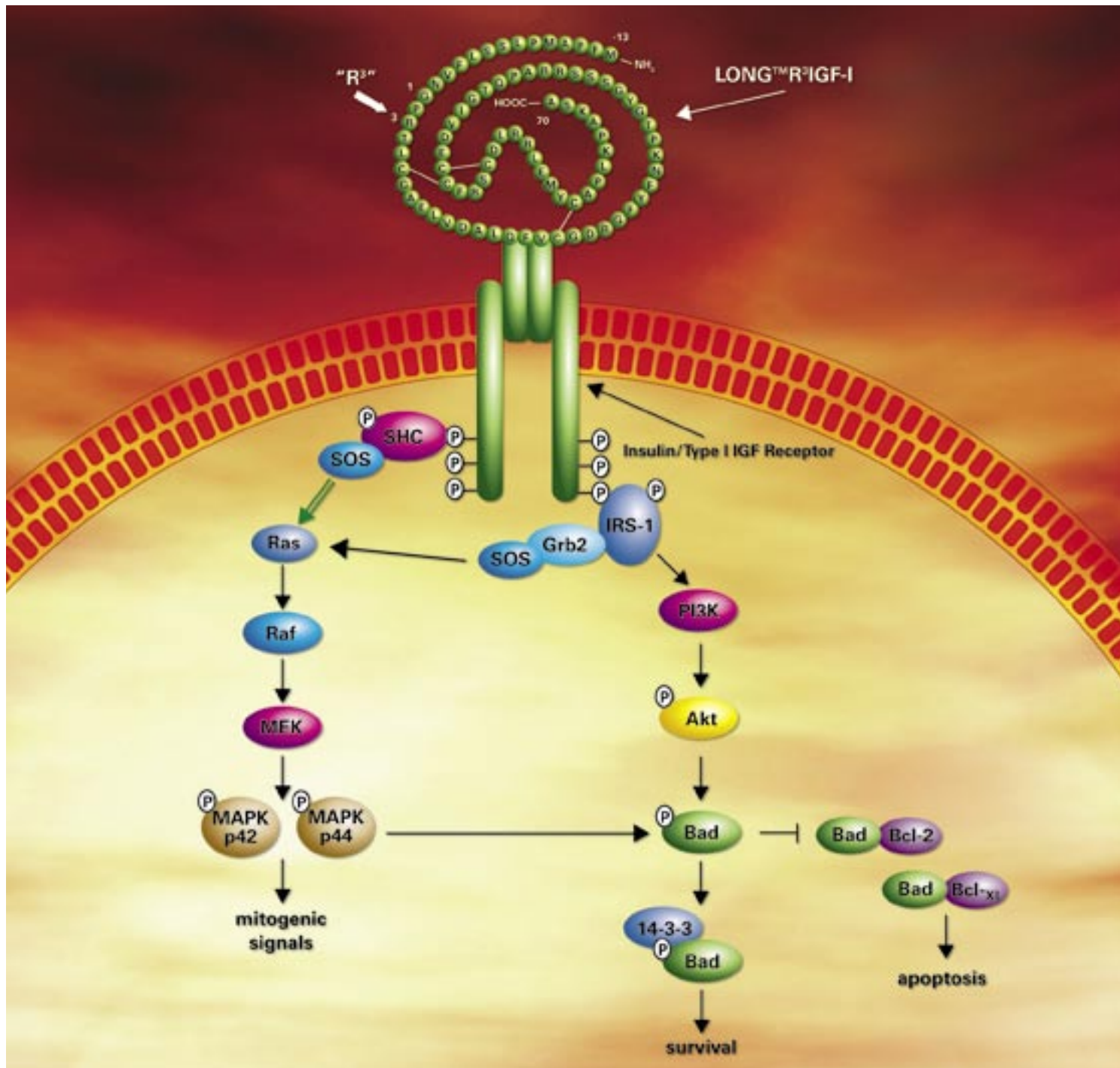
Manufactured under cGMP guidelines, LONG™R³IGF-I is produced by *E. coli* in a completely animal-component free (ACF) system. The LONG™R³IGF-I manufacturing facility currently produces LONG™R³IGF-I for use in more than 80 million liters of serum-free media annually; this capacity can easily be expanded. With full traceability of raw materials and Certificates of Origin, LONG™R³IGF-I is regulatory-compliant as well.

Catalog Number	Available Sizes
85580C	1 mg, 5 mg, 10 mg, 20 mg, 50 mg
Test	Specification
Appearance	Lyophilized white/creamy crystalline powder
Biological Activity	ED ₅₀ < 10 ng/mL (stimulation of protein synthesis in L6 myoblasts)
Endotoxin	< 0.1 EU/μg
Identity	Confirmed by N-terminal sequence analysis (18 residues > 95% single sequence)
Molecular Weight	9110 ± 2 kDa (Mass Spectrometry)
Purity	> 95%

LONG™R³IGF-I

Your Insulin Alternative

- Manufactured **exclusively** for cell culture applications
- Currently used in the manufacture of FDA/EMEA approved pharmaceutical products
- Produced using an animal-component free (ACF) process, meeting cGMP standards
- Current capacity to supplement 80 million liters of serum-free media, with room to grow



Responsive Expertise

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Accelerate Success™

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