biotechne

Redefining Industry Standards

WITH NEXT GENERATION IL-11

Renowned R&D Systems[™] quality with Bio-Techne Innovation

For almost 40 years, R&D Systems[™], a Bio-Techne brand, has strived to offer high quality proteins to enable your scientific research. Over the years, we continuously improve by incorporating scientific advancements in protein purification and cell culture. Rather than just meeting industry standards, we're on a mission to define them. Our modernized methods safeguard your access to high-quality recombinant proteins throughout your research journey.

Our **next generation** of cytokines and growth factors merges our renowned quality and innovation, offering you an unparalleled combination of dependability and stability of supply. These best-in-class proteins ensure your research remains at the forefront of progress. Consider our **Next Generation IL-11** (<u>Catalog # 10836-</u> IL) and explore the key benefits!

Key Benefits of Our Next Generation IL-11 Protein



Increased Supply: Improved manufacturing processes allow for greater scalability & robust supply chain.



Equivalent Bioactivity: Our next generation IL-11 protein displays the same activity as our legacy protein.



Time & Cost-Savings: Cost-effective proteins with larger lot sizes, allowing for less time spent on bridging studies.

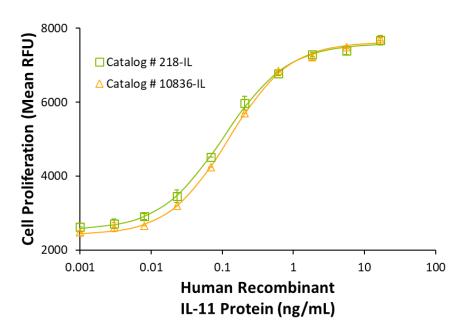


Figure 1: Analysis of Next Generation IL-11 Protein Bioactivity

New Recombinant Human IL-11 Protein Activity. The bioactivities of the original (Catalog # 218-IL) and the new (Catalog # 10836-IL) Recombinant Human IL-11 proteins were compared using a cell proliferation assay with T11 mouse plasmacytoma cells. Based on this assay, both proteins display similar activity.

Table: Comparison of Legacy and Next Generation Recombinant Human IL-11 Proteins

Specifications	218-IL (Legacy)	10836-IL (Next Generation)
Activity	Measured in a cell proliferation assay using T11 mouse plasmacytoma cells. Nordan, R.P. et al. (1987) J. Immunol. 139:813. The ED ₅₀ for this effect is 0.02-0.12 ng/mL.	Measured in a cell proliferation assay using T11 mouse plasmacytoma cells. Nordan, R.P. et al. (1987) J. Immunol. 139:813. The ED ₅₀ for this effect is 0.02-0.12 ng/mL.
Source	Spodoptera frugiperda, Sf21 (baculovirus)- derived human IL-11 protein Pro22-Leu199	Chinese Hamster Ovary cell line, CHO- derived human IL-11 protein Pro22-Leu199
Purity	>97%, by SDS-PAGE	>95%, by SDS-PAGE.
N-terminal Sequence	Pro22	Pro22
Predicted Molecular Mass	19 kDa	19 kDa
Pack Sizes	5, 25 µg	10, 50 µg
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS and EDTA	Lyophilized from a 0.2 µm filtered solution in PBS and EDTA with Trehalose.
Endotoxin		<0.10 EU per 1 μg of the protein by the LAL method.