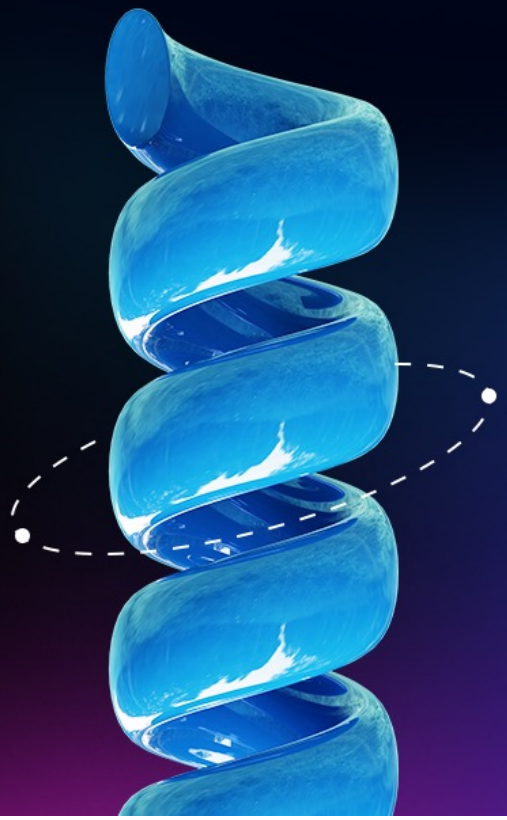
bio-techne®

Redefining Industry Standards

WITH NEXT GENERATION TGF-β1



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 TGF-β1** (Catalog # 7754-BH) and explore the key benefits!

Key Benefits of Our Next Generation TGF-β1 Protein

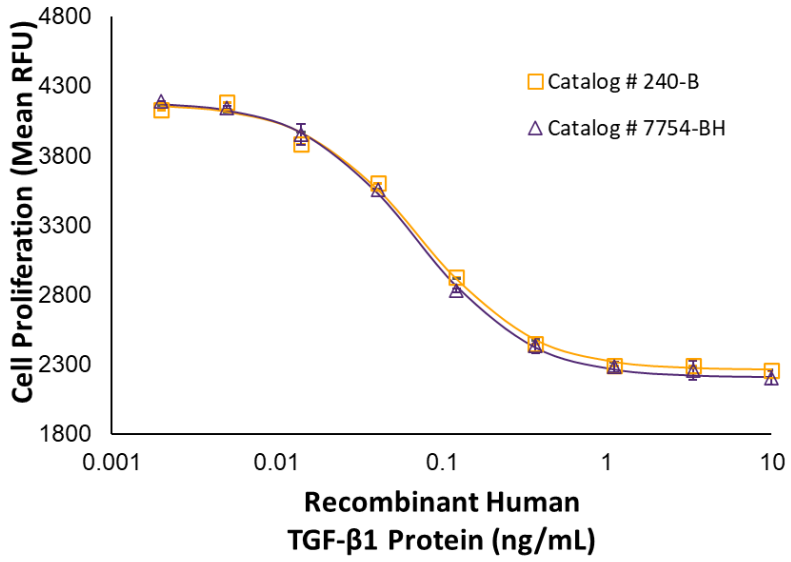
Increased Supply: Improved manufacturing processes allow for greater scalability & robust supply chain.

Equivalent Bioactivity: Our next generation TGF-β1 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.

Learn more | bio-techne.com/proteins/reagents/nextgenerationproteins

Figure 1: Analysis of Next Generation TGF-β1 Protein Bioactivity



New Recombinant Human TGF-β1 Protein Activity. The bioactivities of the legacy (Catalog # 240-B) and the new (Catalog # 7754-BH) Recombinant Human TGF-β1 proteins were compared by assessing their abilities to inhibit IL-4-induced cell proliferation of HT-2 mouse T cells. Both proteins display similar activity.

Table: Comparison of Legacy and Next Generation Recombinant Human TGF-β1 Proteins

Specifications	240 B (Legacy)	7754 BH (Next Generation)
Activity	Measured by its ability to inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. Tsang, M. et al. (1995) Cytokine 7:389. The ED_{50} for this effect is 0.04-0.2 ng/mL.	Measured by its ability to inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. Tsang, M. et al. (1995) Cytokine 7:389. The ED_{50} for this effect is 0.04-0.2 ng/mL.
Source	Chinese Hamster Ovary cell line, CHO-derived human TGF-β1 protein Ala279-Ser390	Human embryonic kidney cell, HEK293-derived human TGF-β1 protein Ala279-Ser390
Purity	>97%, by SDS-PAGE	>95%, by SDS-PAGE
N-terminal Sequence	Ala279	Ala279
Predicted Molecular Mass	12.8 kDa	12.8 kDa
Pack Sizes	2, 10, 500 µg, 1 mg	5, 25, 100, 500 µg, 1 mg
Formulation	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA.	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA.
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.	<0.10 EU per 1 µg of the protein by the LAL method.

ITEM ID: 5601847593