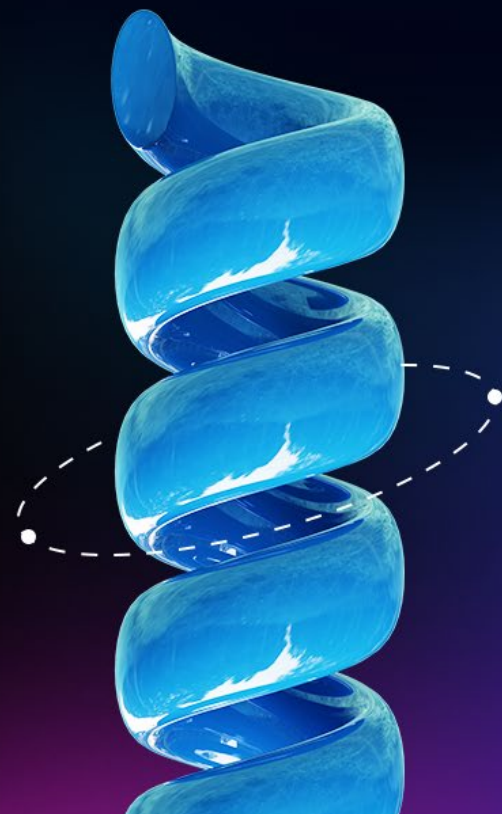




Redefining Industry Standards

WITH NEXT GENERATION **BDNF**



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 BDNF** ([Catalog # BT-BDNF](#)) and explore the key benefits!

Key Benefits of Our Next Generation BDNF Protein



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



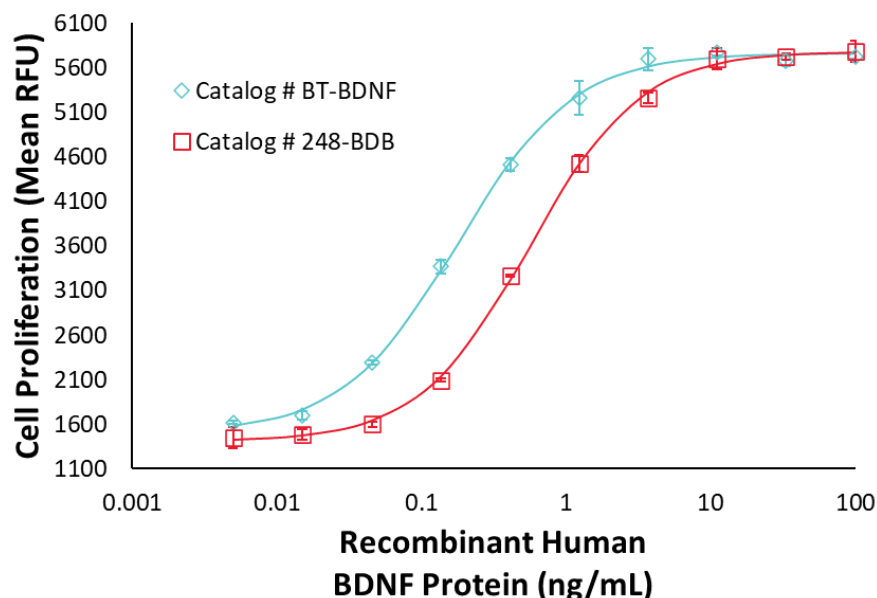
Equivalent Bioactivity: Our next generation BDNF protein displays the same activity as our legacy protein.



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](https://www.bio-techne.com/proteins/reagents/nextgenerationproteins)

Figure 1: Analysis of Next Generation BDNF Protein Bioactivity



New Recombinant Human BDNF Protein Activity. The bioactivity of the new Recombinant *E. coli*-derived BDNF ([Catalog # BT-BDNF](#)) was compared to the bioactivity of the original Recombinant Human SF21 (baculovirus)-derived BDNF ([Catalog # 248-BDB](#)) by testing the ability of the proteins to stimulate proliferation of the BaF mouse pro-B cells transfected with TrkB.

Table: Comparison of Legacy and Next Generation Recombinant Human BDNF Proteins

Specifications	248-BDB (Legacy)	BT-BDNF (Next Generation)
Activity	Measured in a cell proliferation assay using BaF mouse pro-B cells transfected with TrkB. The ED ₅₀ for this effect is 0.2-2 ng/mL.	Measured in a cell proliferation assay using BaF mouse pro-B cells transfected with TrkB. The ED ₅₀ for this effect is 0.1-1.0 ng/mL.
Source	<i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived BDNF protein. His129-Arg247.	<i>E. coli</i> -derived human BDNF protein Arg134-Arg247, with an N-terminal Met
Purity	>97%, by SDS-PAGE	>97%, by SDS-PAGE
N-terminal Sequence	His129	Met
Predicted Molecular Mass	13.5kDa	13.1kDa
Pack Sizes	10, 50, 250 µg	20, 50, 100, 250 µg, 1 mg
Formulation	Lyophilized from a 0.2 µm filtered solution in Sodium Citrate and NaCl.	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
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.