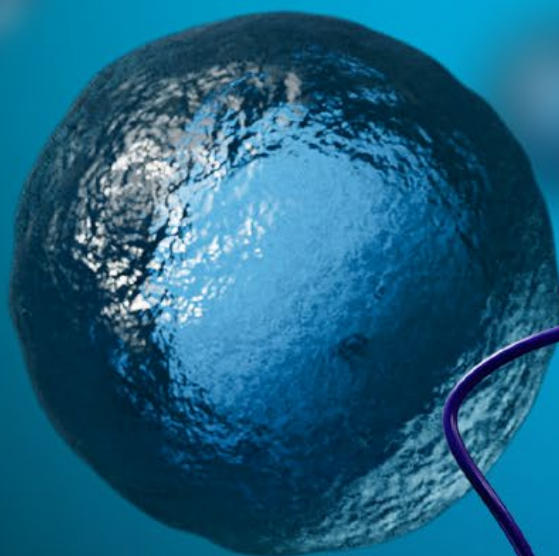
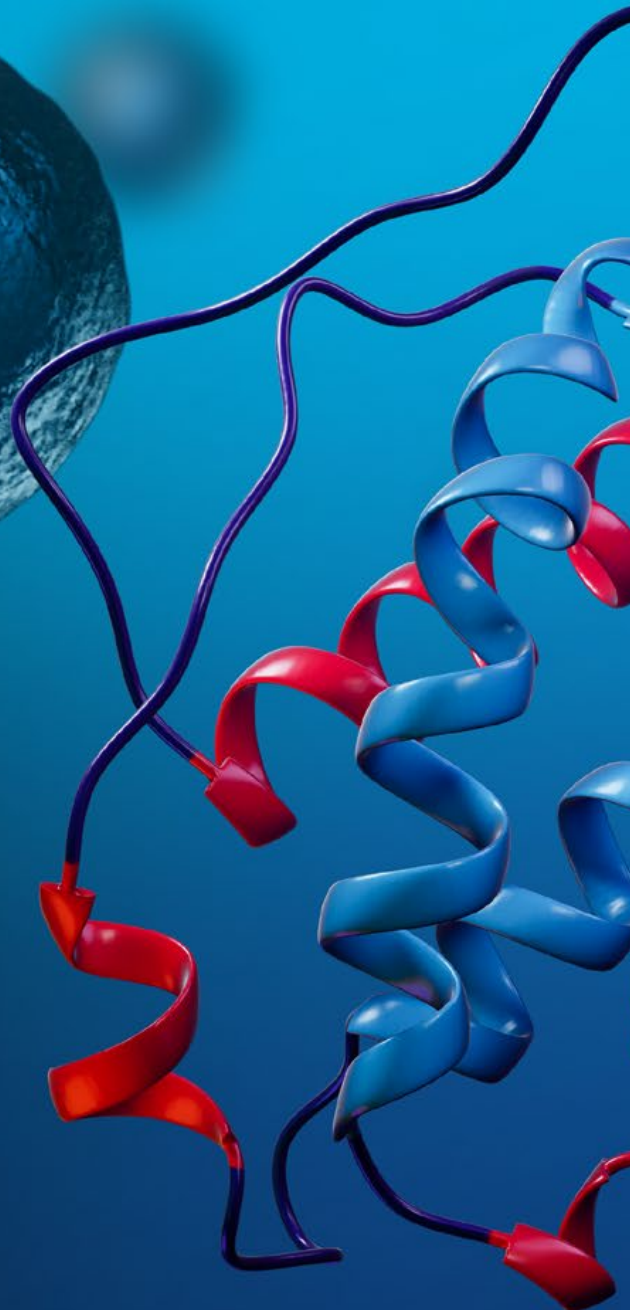


biotechne®



Realize Your **Protein & Cell** Potential



Find it at eu.fishersci.com

 **fisher scientific**
part of Thermo Fisher Scientific

Your Business, Our Support



HARNESS OVER 40 YEARS OF PROTEIN MANUFACTURING
EXPERTISE WHEN YOU CHOOSE BIO-TECHNE AS A PARTNER



ANTHONY PERSON, Ph.D.

Vice President
of Protein Development



"Through R&D Systems, Bio-Techne has a long history of providing our customers with the highest quality proteins on the market. Our team of scientists are dedicated to utilizing our cutting-edge expression and purification procedures to give our customers the best proteins available. We offer extensive analytical capabilities and bioassay services to ensure a protein has the physical characteristics and bioactivity that our customers require."

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Industry-Leading Proteins



Over 40 years of protein manufacturing knowledge and experience enables us to be first to market in new areas, as with our range of **avi-tagged proteins**, **fluorokines**, and **animal-free proteins**.

UNBEATABLE BIOLOGICAL ACTIVITY

Our scientists go the extra mile to develop proteins of the highest quality for your business.

- Proprietary methods to guarantee accurate protein folding ensure that our proteins are biologically relevant
- With over 1000 different bioactivity assays performed on our catalog proteins, we provide the most accurate and relevant activity data for your protein of interest

QUALITY AND CONSISTENCY TIME AFTER TIME

We know that our partners need dependable products that deliver reproducible results. By investing in a Bio-Techne protein, you benefit from our rigorous quality control processes.

EXTENSIVE QUALITY CONTROL

Our QC measures for GMP and animal-free proteins include lot-specific Certificates of Analysis, dedicated manufacturing space, monitoring of product stability over shelf life and transparent traceability of raw materials.

By the Numbers

5163
Protein Targets

36
GMP Proteins

319
Biotinylated Targets

67
Species

LOT-TO-LOT CONSISTENCY

Each new product lot is tested side-by-side with previous lots for purity, biological activity, and endotoxin level. We also routinely test a sample from an earlier lot to control for variability in the assay itself.

LOW ENDOTOXIN AND MICROBIAL BIOBURDEN

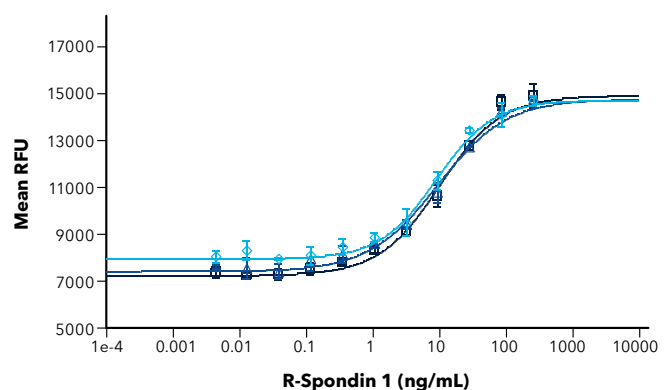
Each new production lot is tested for contamination using microbial bioburden. This ensures our reagents have the low levels required by industry standards.

ACCURATE PROTEIN SEQUENCES

N-terminal amino acid sequence analysis is performed for every recombinant protein we develop.

BUFFER SYSTEMS

We take great care that our proteins are made, stored and shipped in physiologically relevant buffers for optimal bioactivity and stability.



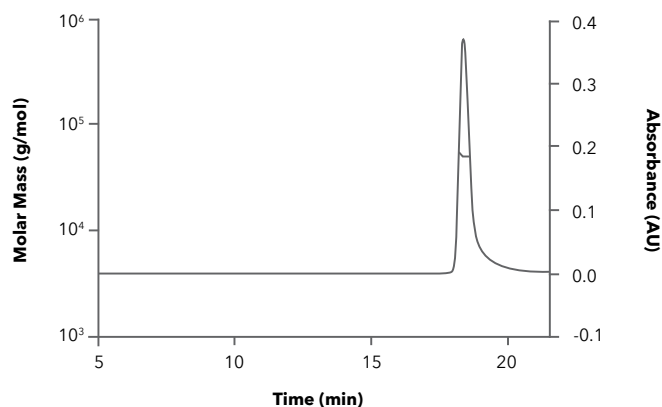
High Lot-to-lot Consistency and bioactivity of Human R-Spondin 1. Three independent lots of Recombinant Human R-Spondin 1 (Catalog # 4645-RS) were tested for their ability to stimulate activation of β -Catenin using a TOPflash β -Catenin/TCF reporter assay. HEK293T human kidney cell lines were used in the presence of 5 ng/mL Recombinant Mouse Wnt-3a (Catalog # 1324-WN). Each trace represents data obtained from Recombinant Human R-Spondin 1 from a different manufacturing run.

Read more about our proteins
bio-techne.com/reagents/proteins

Utilize the Potential of SEC-MALS Analysis for Protein Characterization



Size Exclusion Chromatography Multi-Angle Light Scattering (SEC-MALS) is a powerful analytical tool that couples the separation of proteins into monomers, dimers and trimers with multiple detectors designed to provide accurate protein characterization. SEC-MALS provides quantitative data like molecular weight, purity, oligomeric state and homogeneity. Bio-Techne strives to offer customers new ways to evaluate our proteins for quality and reliability.



THE BENEFITS

- **Accurate Molecular Weight Determination**

SEC-MALS provides accurate and precise measurements of the molecular weight of proteins in solution.

- **Determination of Aggregation State**

SEC-MALS can identify protein aggregates and oligomers in a sample. This is crucial because protein aggregation can lead to changes in biological activity and potential immunogenicity in therapeutic proteins.

- **Quantification of Purity**

By analyzing the scattering data, SEC-MALS can help to identify and quantify the presence of impurities, aggregates, and other contaminants.

- **Information on Protein Conformation**

SEC-MALS analysis also provides information about the size and shape of the protein in solution, giving insights into its conformation and folding.

SEC-MALS Data	Result
Retention Time	18.6 - 19.0 min
MW - Predicted (Monomer)	17.0 kDa
MW - MALS	52.3 kDa
Polydispersity	1.000
System Suitability: BSA Monomer 66.4 ± 3.32 kDa	Pass

Recombinant Human TNF- α (HEK293-expressed) Protein SEC-MALS 1. Recombinant human TNF- α (Catalog # 10291-TA) has a molecular weight (MW) of 52.3 kDa as analyzed by SEC-MALS, suggesting that this protein is a homotrimer. MW may differ from predicted MW due to post-translational modifications (PTMs) present (i.e. Glycosylation)

Learn more about SEC-MALS analysis
[bio-techne.com/reagents/proteins/sec-mals](https://www.bio-techne.com/reagents/proteins/sec-mals)

Discover New Avi-Tag Biotinylated Recombinant Proteins



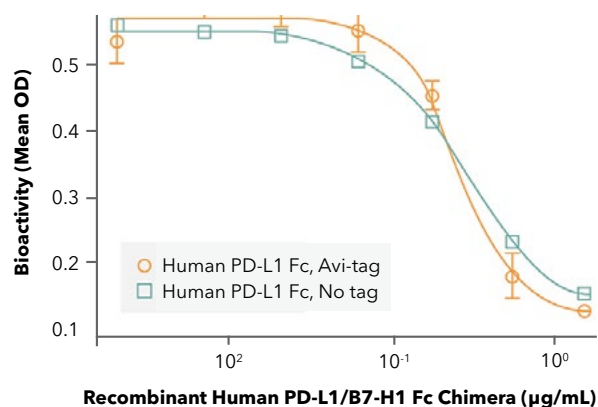
Avi-tag proteins have a 15 amino acid fusion tag (avi-tag) incorporated into the protein of interest. The avi-tag is recognized by the BirA biotin ligase, binding and biotinylating to add a lysine on the tag sequence. The recombinant protein will have a single biotin molecule.

Each avi-tagged biotinylated protein is manufactured to the same industry-leading R&D Systems quality and consistency standards. Our custom protein development team can also work with you to create a protein solution to meet your specific research needs.

THE BENEFITS

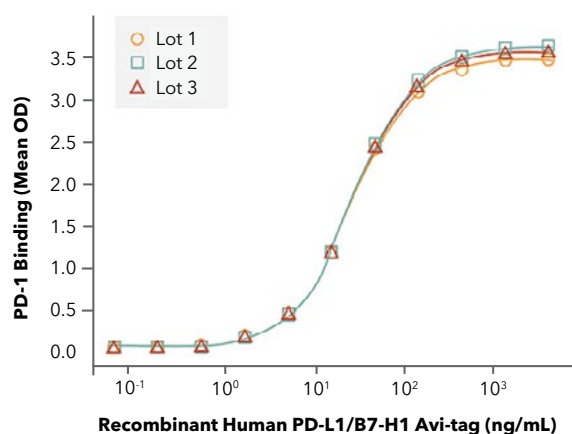
- **Consistent labeling**
Biotinylation only occurs on the single lysine residue in the avi-tag.
- **Uniform orientation of protein**
When bound to a streptavidin-coated surface, the avi-tagged protein orientation will be uniform due to the precise control over biotinylating.
- **Equivalent bioactivity across your protein of interest**
Restriction of the biotinylating to the avi-tag can limit alteration to the rest of the protein, thereby retaining your protein's inherent bioactivity.

BIOACTIVITY



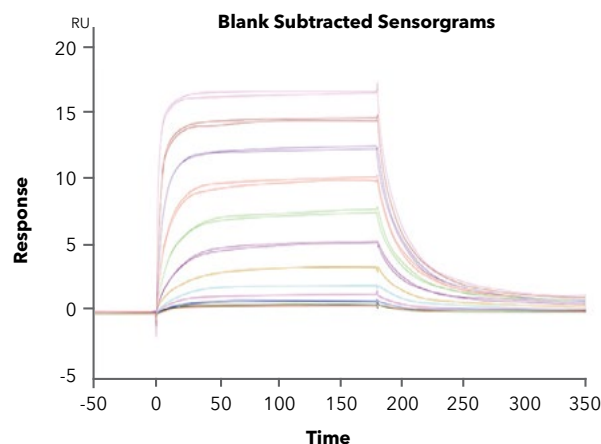
Both Biotinylated Recombinant Human PD-L1/B7-H1 Fc avi-tag and unlabeled Recombinant Human PD-L1/B7-H1 inhibit anti-CD3 antibody-induced IL-2 secretion in human T lymphocytes. The similarity in activity highlights that the biotinylated Avi-tag protein is fully functional.

LOT-TO-LOT CONSISTENCY



Three independent lots of B7-H1/PD-L1 have near identical bioactivity when Recombinant Human PD-1 (#1086-PD) is coated at 1 µg/mL and binds to Biotinylated Recombinant Human PD-L1/B7-H1 Avi-tag (#AVI156).

SURFACE PLASMON RESONANCE (SPR) DATA



Immobilized CD155/PVR-Fc Avi-tag (Catalog # AVI9174) bound to streptavidin CM5 chip binds to TIGIT-Fc (Catalog # 7898-TGB) with an affinity constant of 25.4 nM. Experiment performed on Biacore T200, GE Healthcare.

Learn more about **Avi-Tag Biotinylated Proteins**
bio-techne.com/reagents/proteins/avi-tag-proteins

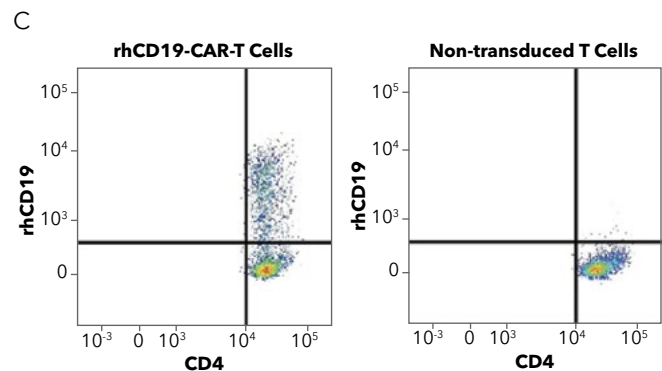
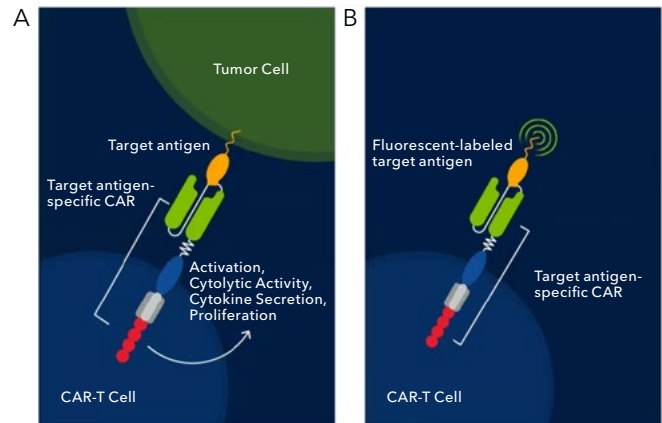
Fluorokines™: Direct, Specific, & Background-Free



Bio-Techne Fluorokines™ are fluorescent-labeled recombinant proteins designed for direct target staining and detection by flow cytometry. Fluorokines are comprised of a bioactive protein conjugated to a fluorophore. The manufacturing process ensures minimal lot-to-lot variability and a consistent F/P ratio. Each protein's specificity is quality control tested through flow cytometry to confirm accurate target staining.

THE BENEFITS

- **Highly specific for direct target molecule detection**
- **Eliminate background staining from indirect methods**
- **Labeled with Alexa Fluor® and Atto dyes**
- **Rigorously tested for lot-to-lot consistency**
- **Compatible with antibody panels**



Demonstration of the Utility of a Fluorokine for Evaluating CAR Expression. (A) CAR-T cell therapy is based on the principle that T cells removed from a patient or donor can be genetically engineered to express a specific chimeric antigen receptor (CAR). Once these CAR-T cells are infused back into the patient, the CAR will bind to its specific target antigen on the surface of the patient's tumor cells, activating the T cells, and allowing them to attack and destroy the tumor cells. (B) The ability to evaluate CAR expression following T cell transduction is an important step in the production of CAR-T cells. T cells expressing the CAR can be directly stained using a Fluorokine (target antigen) and the percentage of CAR-expressing cells can be detected by flow cytometry. (C) CD4⁺CD8⁺ T cells were transduced with a hCD19-CAR (left) or not transduced (right) and then cultured for 11 days. Cells were stained with a PE-Cy7-CD4 and Recombinant Human CD19 Fc Chimera Atto 488 Protein (Catalog # ATJ9269), and detected by flow cytometry.

Learn more about Fluorokines™

[bio-techne.com/reagents/proteins/fluorokines-fluorescent-labeled-proteins](https://www.bio-techne.com/reagents/proteins/fluorokines-fluorescent-labeled-proteins)

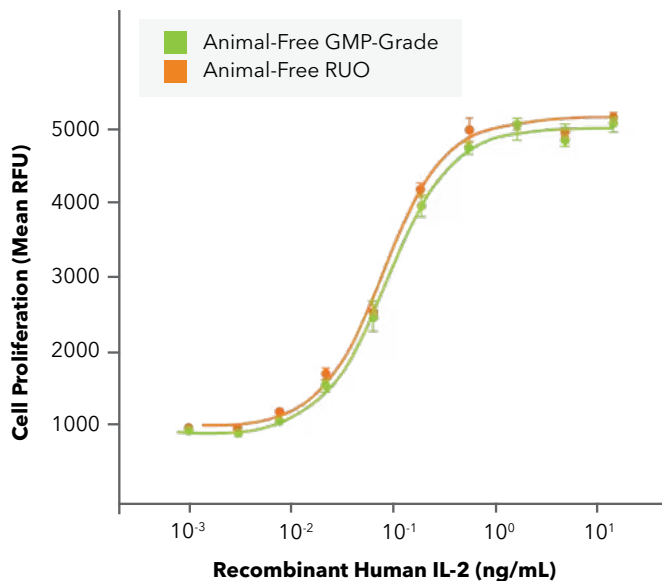
Achieve Consistency, Safety, and Sustainability with Animal-Free Recombinant Proteins



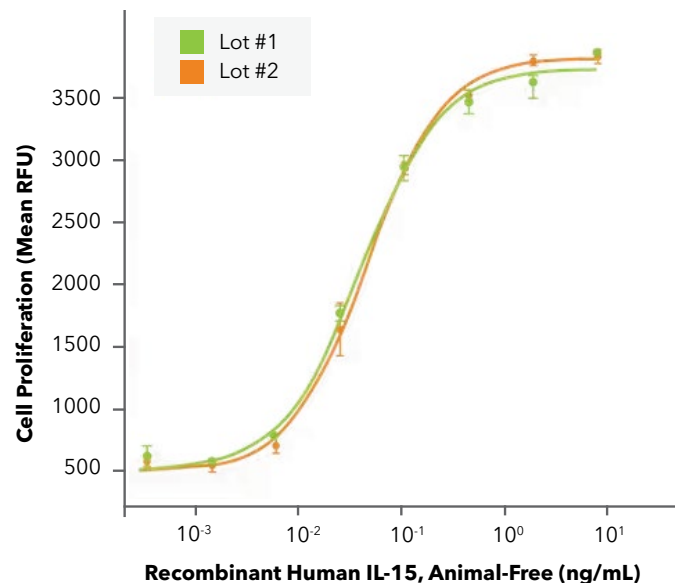
Bio-Techne Animal-Free proteins are the right choice for preclinical *ex vivo* cell culture that may advance to clinical applications. These proteins are 100% free of animal components, addressing regulatory and ethical concerns. Manufactured using the same systems and faculty as our Animal-Free GMP-Grade proteins, they facilitate a smooth transition from preclinical research to clinical manufacturing.

THE BENEFITS

- Produced in dedicated animal-free labs
- Ensure process reproducibility with high lot-to-lot consistency
- Enhance safety and regulatory profile by eliminating risk from adventitious agents
- Offer comparable bioactivity to research-grade and GMP-grade proteins
- Addresses regulatory, ethical and safety concerns, while supporting sustainability goals



Animal-Free RUO and GMP-Grade Recombinant Human IL-2 Display Equivalent Bioactivity. The bioactivities of Animal-Free RUO Recombinant Human IL-2 (Catalog # BT-002-AFL; orange line) and Animal-Free GMP-grade Recombinant Human IL-2 (Catalog # BT-002-GMP; green line) were compared by testing the ability of the proteins to stimulate proliferation of the MO7e human megakaryocytic leukemic cell line.



Analysis of the Lot-to-Lot Consistency of Animal-Free RUO Recombinant Human IL-15. Two independent lots of Animal-Free RUO Recombinant Human IL-15 (Catalog # BT-015-AFL) were tested for their ability to stimulate proliferation of the CTLL-2 mouse cytotoxic T cell line. Each trace on the graph represents data obtained from Animal-Free RUO Recombinant Human IL-15 from a different manufacturing run, demonstrating the lot-to-lot consistency of the protein.

Find our available Animal-Free proteins
[bio-techne.com/reagents/proteins/animal-free-proteins](https://www.bio-techne.com/reagents/proteins/animal-free-proteins)

GMP Reagents for Cell Therapy Manufacturing



TIM MANNING, Ph.D

Director, Product Management
Proteins Business Unit



"Bio-Techne has a rich history of manufacturing industry-leading cytokines and growth factors. Our GMP line is backed by experienced Quality and Regulatory Teams that allow us to offer the best combination of patient safety, consistency, and supply. We welcome discussions about how we can help solve challenges and partner with you to ensure that your next generation therapies are successful."

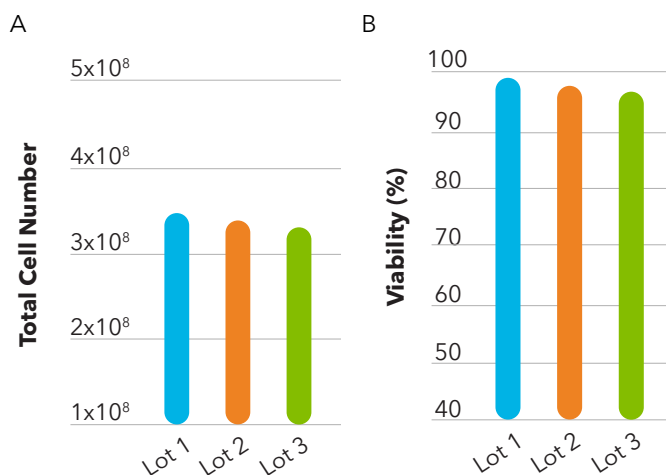
WE OFFER:

- Batch-to-batch consistency
- Serum-free, xeno-free & animal-free production
- Custom reagent services
- Drug Master Files
- Scalability
- Extensive lot-specific quality control testing
- Security of supply
- Equivalent performance from RUO to GMP

As the promise of regenerative cell and tissue therapies grows, so does the need for high quality raw materials and ancillary components for *ex vivo* stem cell manufacturing. With a growing portfolio of GMP-grade cytokines, growth factors, small molecules, and media, we are dedicated to making these therapies a reality.

GMP GROWTH FACTORS AND CYTOKINES

We are dedicated to supplying a consistent, safe, and traceable supply of GMP-grade growth factors and cytokines to both stem cell and immune cell therapy manufacturers. [View all GMP Proteins.](#)



Cell Yield and Viability after G-Rex® Culture in Media Containing New GMP IL-7 & IL-15

CD4+ and CD8+ T cells isolated from a human donor were cultured in a G-Rex® 6M Well Plate (ScaleReady) containing media with one of three lots of GMP-grade Recombinant Human IL-7 and IL-15 (Catalog # BT-007-GMP and Catalog # BT-015-GMP). The average (A) cell yield and (B) cell viability for each lot of cytokines were determined by flow cytometry on day 14. This data shows around a 60-fold expansion of the cells after G-Rex culture with GMP-grade IL-7 and IL-15.

Learn more about GMP Proteins | bio-techne.com/gmp-products/gmp-proteins

Our GMP Manufacturing Facility



We have a state-of-the-art manufacturing facility made specifically for GMP-grade cytokines and growth factors. It was built with scale in mind, allowing for continuity of supply and support through commercialization. The site comes with full support from experienced operational, quality, and regulatory personnel.

Our GMP Manufacturing Facility Complies with the Following Certifications and Regulatory Guidelines

- USP Chapter <1043>, Ancillary Materials for Cell, Gene, and Tissue-Engineered Products
- Ph. Eur. General Chapter 5.2.12, Raw Materials of Biological Origin for the Production of Cell-based and Gene Therapy Medicinal Products
- ISO-9001, ISO-13483-certified facility

HIGHLIGHTED FEATURES

- **Dedicated to GMP protein manufacturing**
- **Completely animal-free**
- **Substantial capacity of 61,000 sq. ft. to fulfill your present and future supply needs**
- **Expandable with available space for additional capacity**
- **ISO 5/7/8 cleanrooms employed throughout the production process**



GMP Small Molecules

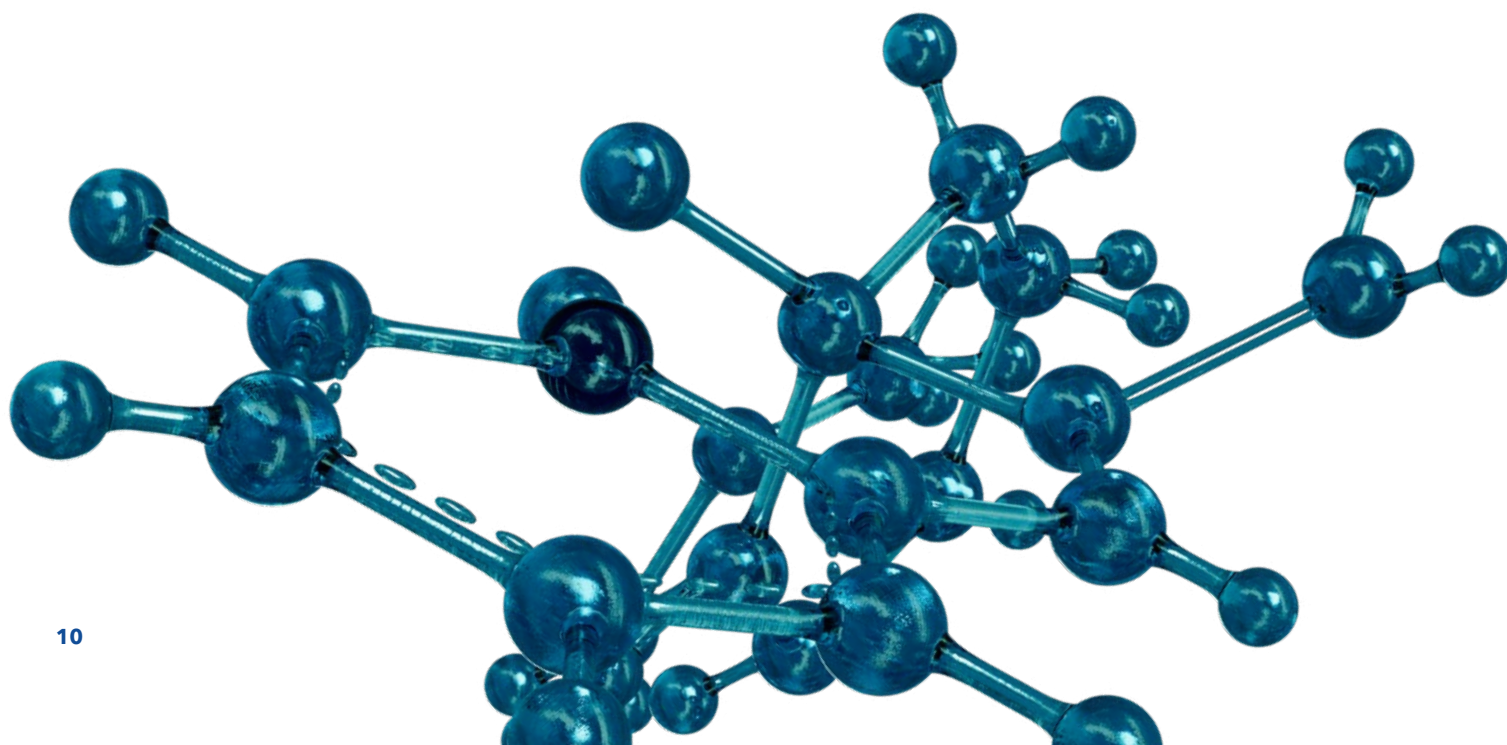


GMP small molecules are important in the manufacture of stem cell therapies for translational research and clinical applications, where they are used as ancillary reagents. Through Tocris Bioscience, Bio-Techne is known for its commitment to quality and offers GMP Small Molecules. They are manufactured in ISO 9001 certified facilities using strictly controlled processes, following relevant sections of ICH Q7, Section 19 guidelines (Good Manufacturing Practice Guide for Active Pharmaceutical Ingredients for use in Clinical Trials), which ensures batch-to-batch consistency, traceability from starting material to final product and animal-free production.

biotechne[®]
TOCRIS

[View GMP Small Molecules](#)

Product Name	Description	Catalog #
Y-27632 dihydrochloride	Selective ROCK Inhibitor. Increases survival of ESCs and iPSCs undergoing cryopreservation.	TB1254-GMP
CHIR 99021	GSK-3 Inhibitor and WNT pathway activator. Enables reprogramming of human somatic cells into iPSCs.	TB4423-GMP
XAV 939	Tankyrase Inhibitor; inhibits WNT signaling. Promotes cardiomyocyte differentiation from ESCs.	TB3748-GMP
SB 431542	TGF Beta 1 (TGF- β), ALK4 and ALK7 Inhibitor. Replaces SOX2 in reprogramming of fibroblasts to iPSCs.	TB1614-GMP
LDN 193189	Potent and selective ALK2 and ALK3 inhibitor. Promotes neural induction of hPSCs.	TB6053-GMP



Large Bulk Quantities? Bio-Techne Can Do It!



Bio-Techne provides competitive bulk discounts for Recombinant Proteins, Antibodies, Assays, and Small Molecules, offering flexibility for individual or multiple purchases.

WANT TO RESERVE AN ENTIRE BULK LOT?

We've got you covered. We can make specific lots for customers to reserve!

HOW MUCH CAN WE FILL?

We offer custom-filled lyophilized and liquid formulations over a range of sizes to meet your application. All bulk order fill sizes are determined on a case-by-case basis depending on the individual protein.

To find out today how much you can save ordering in bulk, fill out our [Bulk Order Requests](#). *Should you require a product not currently available in our catalog, we are happy to discuss custom alternatives.*

Expert Custom Protein Services



WHAT SETS US APART?

We don't shy away from difficult proteins.

PROTEINS, HOW YOU WANT THEM

Our custom recombinant protein expression and purification services develop proteins of high purity, high bioactivity, and lowest endotoxin levels. Add your modifications to our existing catalog proteins or have a protein designed from scratch to meet your desired specifications. Your protein of interest may already be available in our vast selection of noncatalog proteins. Furthermore, our development team now offers custom GMP manufacturing options.

[Inquire about your protein of interest](#)

END TO END SUPPORT

Whether it's project design or post purification support we have you covered. Our dedicated project managers will work with you to ensure the project plan meets your goals. Our analytical support teams will ensure that we can answer any questions you may have about the reagent from stability to identity.

MEET INDUSTRY REGULATIONS

With our expert regulatory affairs team, and facilities certified under compliance with ISO 9001:2015 / ISO 13485:2016/CMDR guidelines, your project can transition smoothly into regulatory submissions.

HEAR FOR YOURSELF

Find out directly from our dedicated custom team on how our custom services can help with your projects in our on-demand webinar: *"Ensure Research Progression with Custom Products and Project Services"*.

[Watch Webinar On-Demand](#)

Tell us about your protein project today | bio-techne.com/services/custom-protein-services
View all custom services | bio-techne.com/services/custom-services

Your Partner
From Design to Completion





Specialty Cell Culture

Media, Matrices, and Supplements



YAS HEIDARI, Ph.D.

Product Manager,
Protein & Cell Biology, Europe



"We routinely optimise our media formulations using design-of-experiments (DOE), and a diverse portfolio of recombinant proteins and small molecules. We also have a large bank of cells including primary cells for media testing and optimization. To keep our media and supplements as consistent and specific as possible, we have developed a host of in house specialized assays to monitor growth, expansion, and differentiation for a variety of cell types."

THE BENEFITS

- All of our media and supplements are designed, produced, and validated in-house.
- Our fully defined and serum-free cell culture media help to decrease experimental variability.
- Each lot is checked for performance consistency, relieving you of unnecessary batch-to-batch screening.
- We routinely manufacture reagents with endotoxin levels below 0.1 EU/ug by LAL assay.



FIND OUT MORE - OUR CELL CULTURE OFFERING



3D cell culture, stem cells, and organoids - culture, verify, differentiate, and analyse. [View organoid reagents and resources](#)



N2-MAX and N21-MAX supplements - Consistent, chemically-defined, and serum-free formulations to enhance performance of your stem cell culture protocols.



ExCelerate™ - defined serum-free and xeno-free media for the robust expansion of immune cells. [Find out more](#)



Browse all cell culture products and resources from Bio-Techne. [View cell culture essentials](#)



Custom cell lines - build your own cell lines, fast. Employ our genome engineering expertise including CRISPR-Cas9, viral vectors and transposons across any primary cell type, stem cells or immune cell populations to generate custom engineered transformed cell lines. [View all Cell & Gene Engineering Services](#)

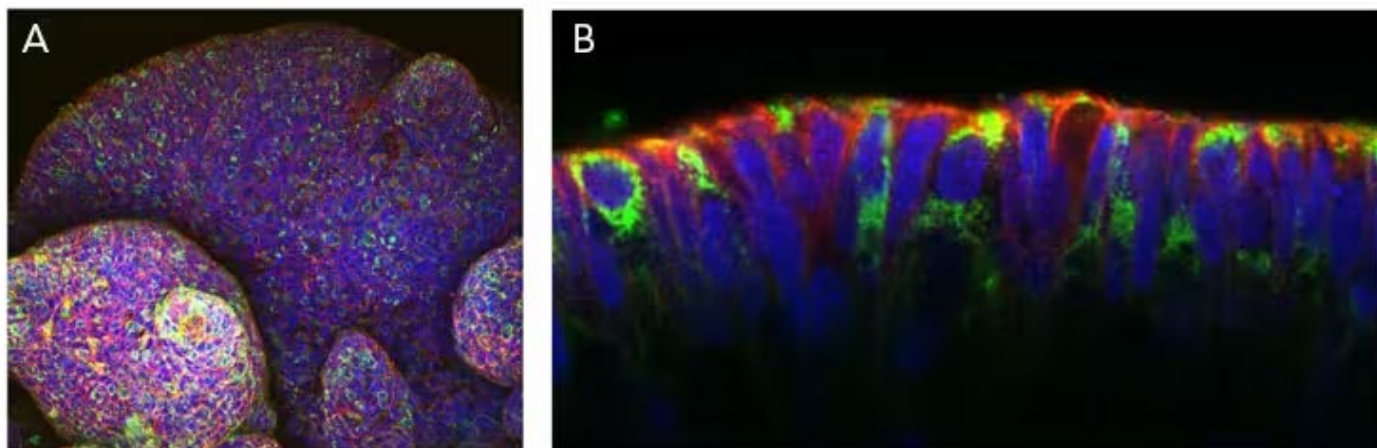
Reagents for Organoid & Stem Cell Culture



Organoids are mini organs generated *in vitro* from tissue or stem cells. They resemble the original organs in structure and function, allowing research on organ development, physiology, disease, drug screening, and personalized medicine. Bio-Techne provides reagents for reliable and reproducible organoid growth, including extracts, growth factors, and small molecules for consistent, reproducible culture conditions.

[See our full range](#)

- Basement membrane extracts (NEW Cultrex™ UltiMatrix RGF Basement Membrane Extract)
- Growth factors
- Small molecules
- Media
- Media supplements
- Antibodies
- RNAscope™ in situ hybridization assays (to identify lineage-specific markers)



Human Descending Colon Organoids. Adult stem cells isolated from human descending colon were embedded in [Cultrex UltiMatrix RGF Basement Membrane Extract](#) (Catalog # BME001-05) and cultured in growth medium for 30 days prior to imaging. **A, B)** Descending colon organoids were stained with [Chromogranin A](#) (green; Catalog # MAB90981) to visualize intestinal enteroendocrine cells, and counterstained for [E-Cadherin](#) (red; Catalog # AF748) and [DAPI](#) (blue; Tocris, Catalog # 5748).

Research Spotlight

Organ-on-a-chip Technology



Organ-on-a-chip technology can be defined as a bioengineered microdevice capable of mimicking the complexity of living human organs. These tools use living human organ-specific cell lines that grow in tiny channels of microfluidic devices. Organ-on-a-chip devices allow for the study of complex living tissue, while also providing advantages over typical organoid culture.

Companies like MIMETAS offer an organ-on-a-chip OrganoReady® product line, and rely on Bio-Techne extracellular matrix (ECM) products for their devices. “The ECM of choice at MIMETAS is [Cultrex Basement Membrane Extract \(BME\)](#) from Bio-Techne. It’s routinely used for a lot of our organ models in-house. It works really well for us, it’s convenient to use, and there’s ease of handling. I’ve been using it for two years and it’s been working well.”

Interested in learning more? Find the application note [here](#).

THE BENEFITS

- **Improved standardization for control over cell numbers, cell type and placement**
- **Greater reproducibility**
- **Easier co-culture conditions for host-pathogen interactions, addition of chemicals, nutrients or molecules**
- **Increase scale for higher-throughput experimental set ups**



Targeted Protein Degradation



JOEL CRESSER-BROWN, PH.D

Product Manager,
Tocris Bioscience



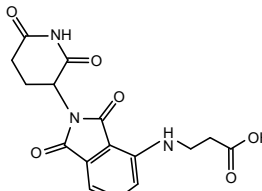
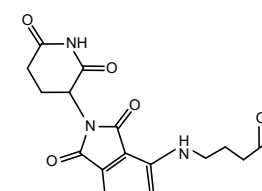
“Bio-Techne has built a powerful workflow solution for researchers in this exciting field. Our product range spans small molecule tools (Active Degraders; Degradation Building Blocks; the PROTAC® Panel Builder); Ubiquitin Proteasome System proteins; assays for TPD (Simple Western, TUBEs, in vitro ubiquitination, CoraFluor™ TR-FRET reagents) and a target validation platform (TAG Degradation Platform). By developing and commercializing research tools for TPD we aim to empower the scientific community to realize the full potential of Targeted Protein Degradation.”

Targeted Protein Degradation (TPD) refers to the use of heterobifunctional small molecule "Degraders" (e.g. PROTAC® molecules) to achieve knockdown of target proteins within cells. PROTAC® Degraders, also known as Active Degraders, consist of binding moieties for an E3 ubiquitin ligase and a target protein joined by a linker. The binding of both moieties results in the formation of a ternary complex between target protein and E3 ligase, leading to polyubiquitination of the target protein, its recognition by the proteasome and subsequent degradation. In this way efficient, sustained and highly selective protein knock-down can be achieved both *in vitro* and *in vivo*.

PROTAC® PANEL BUILDER

We have made Degradation development easier for you with our new [PROTAC® Panel Builder online tool](#). You can use it to quickly select a bespoke collection of functionalized E3 ligase ligands plus linkers for your Degradation development project.

Select your preferred E3 ligase ligands and exit vectors (targeting VHL, cereblon or IAP), linkers (PEG or alkyl chains of variable length) and functional groups to couple to your target ligand of interest, and we will send you a quote for your chosen panel of Degradation building blocks. From mg to g scale, we offer unparalleled quality and customer service.

Select E3 Ligase Ligand + exit vector	+	Select Linkers	+	Select Functional Group	=	Review Structures
<input type="radio"/> Thalidomide 4'-oxyacetamide		<input type="checkbox"/> PEG1		<input type="radio"/> amine		
<input type="radio"/> Thalidomide 4'		<input type="checkbox"/> PEG2		<input checked="" type="radio"/> acid		
<input type="radio"/> Thalidomide 5'-amide		<input type="checkbox"/> PEG3		<input type="radio"/> alkyne		<div style="border: 1px solid black; padding: 5px; text-align: center; width: fit-content; margin: 0 auto;">Request Quote</div> 
<input type="radio"/> Lenalidomide 4'		<input type="checkbox"/> PEG4		<input type="radio"/> azide		
<input type="radio"/> Lenalidomide 4'		<input type="checkbox"/> PEG5		<input type="radio"/> alcohol		
<input checked="" type="radio"/> Pomalidomide 4'		<input type="checkbox"/> PEG6				
<input type="radio"/> A 410099.1 amide	→	<input checked="" type="checkbox"/> alkylC2	→			
<input type="radio"/> LCL 161 phenol		<input checked="" type="checkbox"/> alkylC3				
<input type="radio"/> VH 032 phenol		<input type="checkbox"/> alkylC4				
<input type="radio"/> VH 032 phenol		<input type="checkbox"/> alkylC5				
<input type="radio"/> VH 032 amide		<input type="checkbox"/> alkylC6				
<input type="radio"/> VH 101 phenol		<input type="checkbox"/> alkylC7				
<input type="radio"/> 5'-Fluoro pomalidomide		<input type="checkbox"/> alkylC8				
<input type="radio"/> Phenyl-glutarimide 4'-oxyacetamide		<input type="checkbox"/> alkylC9				
<input type="radio"/> Phenyl-glutarimide 4'-oxyacetamide		<input type="checkbox"/> alkylC10				

PROTAC® Panel Builder Process.

For more information on Degradation development, take a look at our publication on "[Developing degraders: principles and perspectives on design and chemical space](#)" Maple et al. Med. Chem. Comm., 10, 1755-1764 (2019)

PROTAC® is a registered trademark of Arvinas Operations, Inc., and is used under license.

View PROTAC® Panel Builder
tocris.com/protac-panel-builder

Targeted Protein Degradation



TARGET EXPLORATION AND VALIDATION

Active Degraders: Get started with our range of Degradator molecules for key proteins of interest. We also offer a selection of controls and other related small molecules.

[View Active Degraders](#)

TAG Degradation Platform: In TAG degradation the target protein is expressed as a fusion protein, which is targeted for ubiquitination. This allows for *in vivo* validation of targets with no known ligands.

[View TAG Degradation Platforms](#)



ASSAYS FOR TARGETED PROTEIN DEGRADATION

For a reliable and quantitative method of measuring knockdown, our Simple Western™ automated western blotting systems are rapid, gel-free, blot-free, and hands-free.

[Learn More about Simple Western](#)

We offer a modular TR-FRET assay development toolbox comprising CoraFluor™ terbium cryptate FRET donors, fluorescent E3 ligase ligands and antibodies, suitable for evaluating Degradator binding and ternary complex formation.

[Learn more about CoraFluor™](#)



DEGRADER DESIGN AND SYNTHESIS

Develop your own Degradators for your protein of interest using our offering of chemical building blocks.

[View Degradator Building Blocks](#)



E3 LIGASE AND UBIQUITIN PROTEASOME SYSTEM BIOLOGY

To complement our range of Degradators, we also offer superior quality Ubiquitin Proteasome System (UPS) proteins, including E3 ligase enzymes and other proteins.

[View E3 Ligase Products](#)

CUSTOM DEGRADER SERVICES

In addition to our catalog products we offer a range of custom services including:

- **Custom Degradator Building Blocks** - tailored panels for specific development projects, or for customers' internal libraries.
- **Custom Protein Services** - custom production, purification, and characterization of UPS proteins, particularly E3 ligase enzymes.
- **Custom conjugated antibodies** - CoraFluor™ TR-FRET donor and fluorescent acceptor labeled antibodies for TR-FRET assay development.

Get in Touch - Custom TPD Services | tpd@bio-techne.com
Learn more about Targeted Protein Degradation | bio-techne.com/tpd

Contact Us



Our support teams are ready for your inquiry

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