

Shenandoah CTGrade Recombinant Human PDGF-BB

Optimize Cell Proliferation and Function for Immunotherapy

CTGrade rh PDGF-BB is a recombinant human protein that is produced from *E. coli* and is designed to support preclinical and clinical research, as well as commercial applications, and offers:

- High biological activity verified by a relevant bioactivity assay
- Low endotoxin levels
- $\geq 98\%$ purity
- High lot-to-lot consistency



Making the Right Decision the First Time

When designing robust cell and gene therapy processes, making the right decision the first time is critical for delivering therapies to market.

Shenandoah CTGrade interleukins and growth factors are formulated to reduce variability and ensure predictable workflow performance in the proliferation and differentiation of T cells, natural killer (NK) cells, B cells, and chimeric antigen receptor (CAR T) cells.

Together with our unparalleled regulatory guidance and assurance of expected performance, CTGrade interleukins and growth factors help cell and gene therapy developers proactively deliver the full promise of their discoveries.



Achieve Predictable Workflows and Reduce Variability with CTGrade Interleukins and Growth Factors

The predictability and performance of CTGrade interleukins and growth factors help cell and gene therapy developers accelerate delivery of life-changing therapies to market.

The biological activity of CTGrade interleukins and growth factors is standardized, where applicable, to WHO International standards, providing cell and gene therapy developers consistent, lot-to-lot biological activity and performance.

The CTGrade products are manufactured in a facility that does not use or process beta-lactam containing materials. No animal- or human-derived materials were used during manufacturing or as ingredients. These products are manufactured, tested, and released in an ISO 9001:2015 certified facility following cGMP practices. USP chapter <1043> for ancillary materials has been considered in the manufacture of these products.

PDGF-BB (Platelet-derived growth factor) comprises a family of homo or heterodimeric growth factors, including PDGF-AA, PDGF-BB, PDGF-CC, and PDGF-DD.

- Binds to two different transmembrane tyrosine kinase receptors (PDGFR-alpha and PDFGR-beta)
- Released from degranulating platelets and plays a role in each stage of wound healing
- Stimulates mitogenicity and chemotaxis of neutrophils, macrophages, fibroblasts, and smooth muscle cells to the wound site
- Enhances proliferation of fibroblasts and their production of extracellular matrix

Drive Scale-up Readiness with Performance-based Solutions

Cell-Based Proliferation Assay

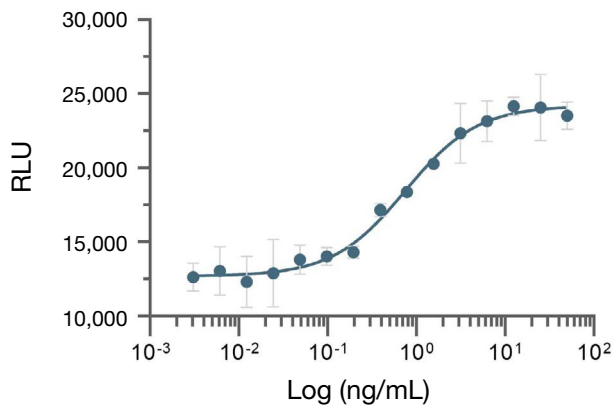


Figure 1. The biological activity of CTGrade rh PDGF-BB was determined in a NR6R/3T3 cell-based proliferation assay.

SDS-PAGE Showing a Single Prominent Band at 12.4 and 24.9 kDa

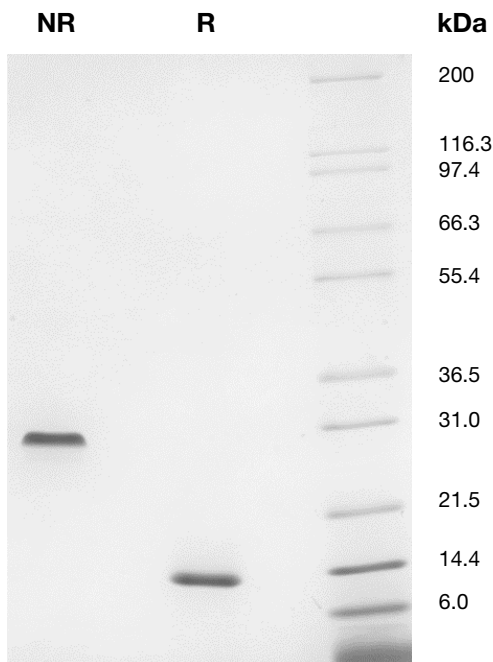


Figure 2. CTGrade rh PDGF-BB (1 μ g) was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by InstantBlue staining showing a single prominent band at 12.4 kDa (R) and 24.9 kDa (NR).*

*Predicted MW 12.4 kDa and 24.9 kDa but runs on SDS-PAGE at ~15 kDa (R) and ~30 kDa (NR).

Shenandoah CTGrade Recombinant Protein Ordering Information

Product Description	Catalog #	Size*	Additional Info
CTGrade rh PDGF-BB	500-25	50 µg 100 µg 1 mg	Provided in lyophilized form.

Related Products

Product Description	Catalog #	Size*	Additional Info
DME High Glucose w/o L-Glutamine	9024	500 mL 1 L	Contains 4,500 mg/L glucose, 3,700 mg/L sodium bicarbonate. Does not contain L-glutamine.
DME High Glucose	9031	500 mL 1 L	Contains 4,500 mg/L glucose, 3,700 mg/L sodium bicarbonate, L-glutamine.
Water for Injection	9309	1 L	Bottle packaging.

* Custom sizes and packaging available on request.

To discuss your requirements, contact us at getinfo@irvinesci.com
Or visit our website at www.irvinesci.com/contact-us



www.irvinesci.com