



Shenandoah CTGrade Recombinant Human FLT-3 Ligand

Optimize Cell Proliferation and Function for Immunotherapy

CTGrade rh FLT-3 Ligand is a recombinant human protein that is produced from *E. coli* and is designed to support basic, translational, and clinical research, as well as commercial applications, and offers:

- High biological activity verified by a relevant bioactivity assay
- Low endotoxin levels
- ≥ 97% 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.

FLT-3 Ligand is a growth factor that regulates proliferation of early hematopoietic cells.

- Binds to cells expressing the tyrosine kinase factor FLT-3
- Synergizes with other CSFs and interleukins to induce growth and differentiation
- Exerts no activity on mast cells, unlike SCF
- Anchored to the cell surface as the extracellular domain of a transmembrane protein, as the predominantly active form of FLT-3
- Can be proteolytically cleaved to generate a biologically active, soluble isoform

Drive Scale-up Readiness with Performance-based Solutions

Cell-Based Proliferation Assay

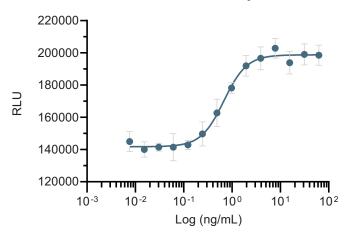


Figure 1. The biological activity of CTGrade rh FLT-3 Ligand was determined in a cell proliferation assay in OCI-AML5 cells.

SDS-PAGE Showing a Prominent Band at 17.7 kDa

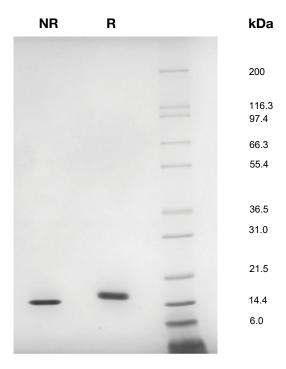


Figure 2. CTGrade rh FLT-3 Ligand (1 μg) was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by InstantBlueTM staining showing a prominent band at 17.7 kDa.

Shenandoah CTGrade Recombinant Protein Ordering Information

Product Description	Catalog #	Size*	Additional Info
CTGrade rh FLT-3 Ligand	500-03	50 μg 100 μg 1 mg	Provided in lyophilized form

Related Products

Product Description	Catalog #	Size*	Additional Info
PRIME-XV Hematopoietic Cell Basal XSFM	91211	500 mL	Xeno-free and serum-free basal medium
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



