# Vitronectin Xf™ vs Matrlgel®

Stem cells have incredible therapeutic potential for regenerative medicine and cell therapy. However, bringing successful therapeutics to the market requires well-defined, consistent products. Standardizing your stem cell process development early on to ensure consistency can expedite your research and development efforts.

## Which Characteristics Benefit Your Stem Cell Process Development?

**Vitronectin XF** | **Matrigel**

### PERFORMANCE

| | | |
|---|---|---|
| ✓ Supports | PERFORMANCE | Supports ✓ |
| ✓ Promotes | PROLIFERATION | Promotes ✓ |
| ✓ Maintains | PLURIPOTENCY | Maintains ✓ |

### EASE OF USE

#### CULTUREWARE

**✓ NON-TREATED WELL PLATE**

Vitronectin solution coats the non-tissue culture-treated cultureware.

**✗ CULTURE-TREATED WELL PLATE**

To ensure cell attachment, Matrigel is dependent on tissue culture-treated well plates.

#### TEMPERATURE

**✓ ROOM TEMPERATURE**

Liquid at room temperature.

Thaw Vitronectin and easily use at at room temperature.

**✗ COLD/ICE**

Not liquid at room temperature.

All materials - media, pipette tips, conical tubes, serological pipettes - must be cold/chilled.

Entire process - preparation, coating application, aliquoting - must be performed cold/on ice.

### REGULATORY COMPLIANCE

#### SOURCE

**✓ HUMAN**

Recombinant, full-length, human vitronectin prepared under xeno-free conditions.

Avoids safety issues from harmful pathogens and other contaminants found in animal-derived components.

**✗ MOUSE**

Solubilized basement membrane preparation extracted from the Engelbreth-Holm-Swarm (EHS) mouse sarcoma cells.

#### COMPOSITION

**✓ FULLY DEFINED & SIMPLIFIED**

Highly characterized: comprised of a single, defined, recombinant full-length human vitronectin sequence fused to a human immobilization domain, expressed under chemically defined conditions.

Use as part of a completely defined system for complete control over your culture environment, resulting in more consistent cell populations and reproducible results in downstream applications.

**✗ UNDEFINED & HETEROGENEOUS**

Heterogeneous mix of non-human, animal origin ECM proteins, undefined extracellular components, and growth factors.

Utilizing Vitronectin, a xeno-free, defined, FDA-friendly ECM that encourages cell proliferation, maintains pluripotency, and is produced in large lot sizes to meet your scaleÂup needs, translates to simpler scale-up and accelerates the all-important pathway for regulatory approval for complex regenerative medicine and cell therapy applications.

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