

# VitroGel® High Concentration

Building blocks for endless creativities and maximum flexibility

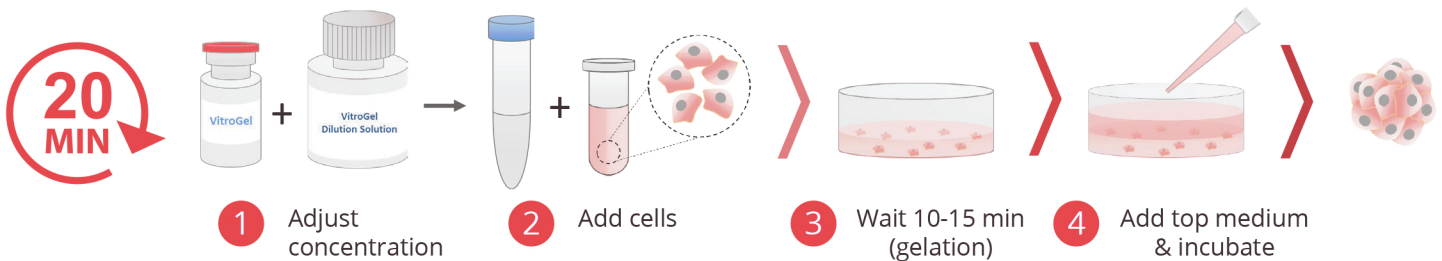
VitroGel® High Concentration hydrogels are our xeno-free, tunable hydrogels for researchers wanting full control to manipulate the biophysical and biological properties of cell culture environment. The tunability of the hydrogel gives the ability to create an optimized environment for cell growth. The solution transforms into a hydrogel matrix by simply mixing with the cell culture medium. No cross-linking agent is required. Cells cultured in this system can be easily harvested. The hydrogel is also injectable for *in vivo* studies. From 2D coating, 3D culture to animal injection, VitroGel makes it possible to bridge the *in vitro* and *in vivo* studies with the same platform system.

- ▶ Choose hydrogels with functional ligands such as RGD, collagen, laminin and MMP.
- ▶ "Mix & Match" Unique to the VitroGel system is the ability to customized multi-functional hydrogel by blending different types of VitroGel together.



## 3D cell culture process in 20 min

(includes a 10-15 min waiting time for hydrogel stabilization)



### Tunable - hydrogel strength

Adjust the hydrogel strength from a wide range to create the optimal cell environment.



### Easy-to-use

No cross-linking agent required. Adjust hydrogel with Dilution Solution and mix with cells, add medium and incubate.



### Xeno-free

100% animal origin-free hydrogel system.



### Work at room temperature

Get rid of your ice bucket! The hydrogel system is room temperature stable with a neutral pH.



### Easy cell harvesting - 20 min protocol

Use our enzyme-free cell recovery solution to harvest cells safely & fast while maintaining high cell viability.



### Mix & Match

Build and create a customized multi-functional hydrogel by blending different types of VitroGel together.



### Transparent

Excellent for imaging systems for cell observation.



### Injectable

After soft gel formation, the hydrogel is injectable for cell therapy and drug delivery applications.



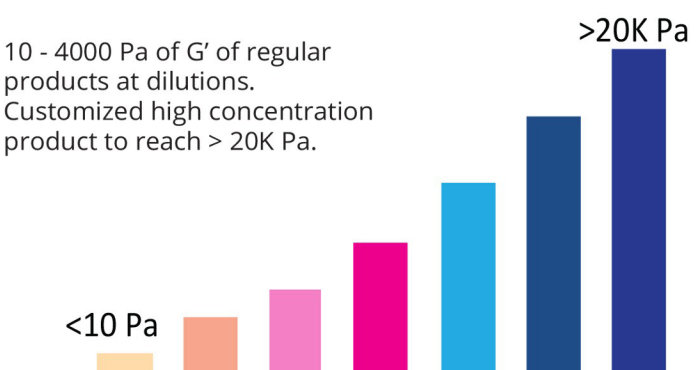
## 3D Cell Culture Your Way

The VitroGel system can be “mixed and matched” with each other. Scientists can tailor create their 3D culture micro-environment by blending different VitroGel system for different applications. Create a customized multi-functional hydrogel by blending different ratios from VitroGel® RGD, VitroGel® IKVAV, VitroGel® YISGR, VitroGel® MMP or VitroGel® COL.

### Tunable hydrogel strength

Simply diluting the hydrogel controls the strength.

10 - 4000 Pa of G' of regular products at dilutions. Customized high concentration product to reach > 20K Pa.



### Compare to other 3D methods

	VitroGel	Basement Membrane Matrix	Polymer Matrix	Hanging Drop Plate
Easy-to-use	●		●	●
Mimic natural ECM	●	●		
Xeno-free	●		●	●
Room temperature stable	●		●	●
Neutral pH	●		N/A	N/A
Easy Cell harvesting	●		●	●
Transparent	●	●	●	●
Multi-functional ligands	●	●		
Wide range hydrogel strength	●			
Injectable	●	●		
Automation friendly	●		●	●

Product	Cat No.	Size
VitroGel® 3D High Concentration	TWG001	3 mL
VitroGel® RGD High Concentration	TWG003	3 mL
VitroGel® IKVAV High Concentration	TWG007	3 mL
VitroGel® YIGSR High Concentration	TWG008	3 mL
VitroGel® COL High Concentration	TWG009	3 mL
VitroGel® MMP High Concentration	TWG010	3 mL
VitroGel® Cell Recovery Solution	MS03-100	100 mL

