

## PA1

## PeptiGel® Alpha 1

### Description

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PeptiGel® Alpha 1 is a ready-to-use fully synthetic neutrally charged peptide hydrogel. PeptiGel® Alpha 1 is biologically relevant, mimics the extracellular matrix and is suitable for the culture of a variety of cells, including chondrocytes, nucleus pulposus cells and suspension cells.

PeptiGel® Alpha 1 is a stiffer hydrogel when compared to Alpha 4 but has consistent mechanical stiffness ( $G'$ ) and pore size, resulting in excellent reproducible results. PeptiGel® Alpha 1 can be used for both *in-vitro* and *in-vivo* applications with physiologically and clinically relevant results.

### Specifications

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<b>Charge</b>	Neutral
<b>Mechanical Properties (kPa)</b>	3.0 – 5.0
<b>GFOGER from Collagen</b>	No
<b>RGD from Fibronectin</b>	No

### Stability and Storage

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**Stability and Storage** At least 6 months shelf life when stored at 4°C as supplied

### General Guidance for Handling and Use of PeptiGels®

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- **Pipetting:** It is recommended to use a positive displacement pipette (e.g. Gilson piston pipette) to facilitate accurate PeptiGel® handling and for mixing PeptiGel® for 3D cell culture.
- **Air bubbles:** Prior to starting work with PeptiGel®, any visible air bubbles can be removed by one or more rounds of centrifugation (1,600 x  $g$  for 1 minute at room temperature). When mixing PeptiGel® for 3D cell culture, the formation of air bubbles should be minimised. This can be achieved by making sure cells are released slowly into the hydrogel whilst gradually bringing the pipette upwards, in a stirring motion. In addition, make sure the pipette tip never leaves the hydrogel while mixing.
- **Diluting:** PeptiGels® can be diluted with HPLC water to help you achieve your desired mechanical strength/s. PeptiGels® are also supplied with a range of mechanical strengths.

### Resources and Protocols

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For additional resources and specific protocols, [click here](#) or scan the QR code.

