

PIAP4

PeptiInk® Alpha 4 PLUS

Description

PeptiInk® Alpha 4 PLUS™ is a ready-to-use fully synthetic positively charged peptide bioink functionalized with fibronectin (RGD) and collagen (GFOGER) motifs, mimicking the extracellular matrix more closely and encouraging better cellular adhesion. PeptiInk® Alpha 4 PLUS™ is suitable for the culture of a wide variety of cells, including primary cells, immortalized cell lines and stem cells.

PeptiInk® Alpha 4 PLUS™ is highly consistent in mechanical stiffness (G') and pore size, resulting in excellent reproducible results. Hence, PeptiInk® Alpha 4 PLUS™ can be used for both in vitro and in vivo applications with physiologically and clinically relevant results.

Specifications

Charge	Positive (+2)
Mechanical Properties (kPa)	0.35 – 0.7
GFOGER from Collagen	Yes
RGD from Fibronectin	Yes

Stability and Storage

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

General Guidance for Handling and Use of PeptiInks®

- **Pipetting:** It is recommended to use a positive displacement pipette (e.g. Gilson piston pipette) to facilitate accurate PeptiInk® handling and for mixing PeptiInk® for 3D cell culture.
- **Air bubbles:** Prior to starting work with PeptiInk®, 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 PeptiInk® 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. PeptiInks® are also supplied with a range of mechanical strengths.

Resources and Protocols

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

