

Directions for Use

PhotoSericin®-LAP Methacrylated Sericin Kit

SERICIN METHACRYLATE WITH LAP KIT FOR PHOTOCROSSLINKABLE HYDROGELS
Catalog Number #5431-1KIT

Product Description

Advanced BioMatrix offers PhotoSericin®, a purified sericin methacrylate kit, which provides 3D sericin gels with the unique attributes to be prepared at various concentrations and photocrosslinked to provide various gel stiffness.

The PhotoSericin® LAP kit consists of sericin methacrylate and a visible light photoinitiator.

Table 1:

Item	Catalog No.	Package Size
Methacrylated Sericin, Lyophilized	5430	1 gram
Photoinitiator LAP	5269-100MG	100 mg

Our Sericin Methacrylate achieves a degree of substitution of 5-20% for maximum crosslinking and range of stiffness.

The photoinitiator consists of LAP which needs to be formulated in 1X PBS or cell culture media, allowing for visible light photocrosslinking of the sericin at 405 nm.

Storage/Stability:

The product ships on frozen gel packs. Upon receipt, store the sericin methacrylate at -20°C. Store the LAP at 2-8°C.

Preparation Instructions

Note: Employ aseptic practices to maintain the sterility of the product.

Note: The following instructions are for a 10% sericin methacrylate solution. Recommended concentrations are 10-30%

1. Add the 10 mL's of 1X PBS to the amber vial containing 1 gram of lyophilized sericin methacrylate.
2. Gently mix on a shaker table or rotator plate until fully solubilized. Avoid vortexing as to avoid bubbles. Mixing may be done warm (>37°C) or at room temperature (20-22°C).
3. Calculate the volume of photoinitiator to add by multiplying the volume of solubilized sericin by 0.02. If the resulting number is 200 µL, for example, you will add 200 µL of LAP.
4. Solubilize the required amount of LAP (per step 3) at a concentration of 17 mg/ml in 1X PBS or cell culture media. Photoinitiator can be sterilized through a 0.2µm button filter.
5. Add the LAP to the sericin solution and fully mix until solution is homogeneous.
6. Dispense your sericin/photoinitiator/cell solution into the desired dish (ie. 6-well plate, 48-well plate).
7. For photocrosslinking, place hydrogel directly under a 405 nm visible light crosslinking source.

Any excess material can be refrigerated and stored. Long term shelf life studies are in process. We recommend only adding photoinitiator to the amount of sericin to be used at that time.