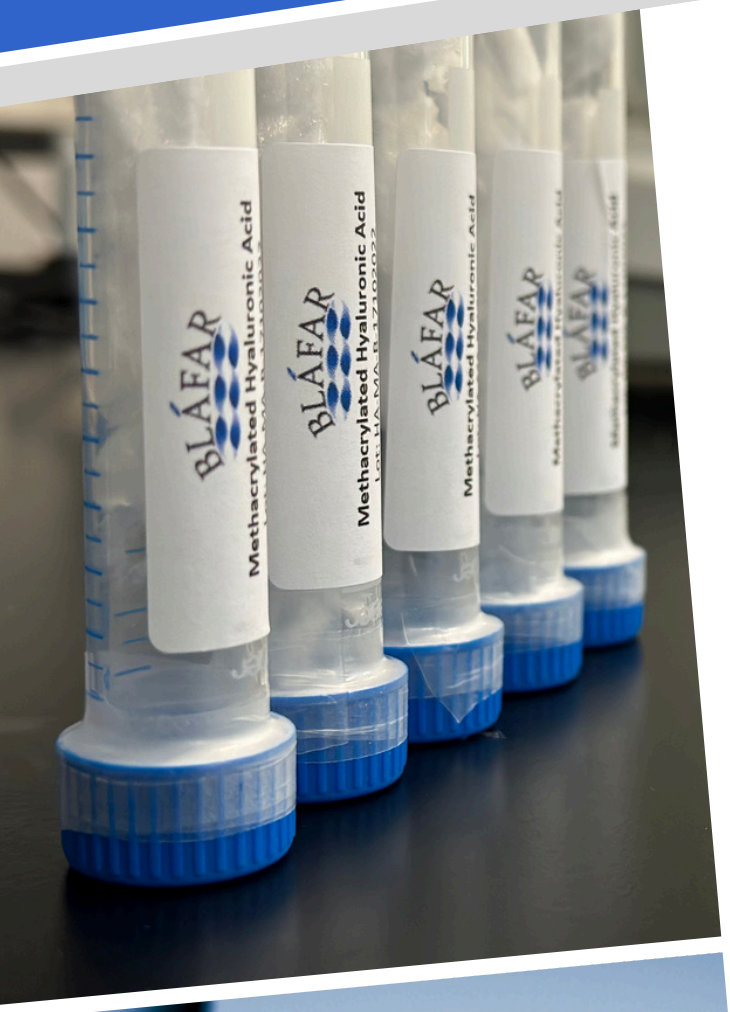

BLÁFAR

We Design Biopolymers !

Injectable hydrogel kit

InjectVivo™

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Product Introduction

This kit enables the rapid formation of an injectable, in situ crosslinking hydrogel based on functionalized hyaluronic acid. By simply mixing HAA and HASH at the recommended ratio, a stable 3D hydrogel network is formed via a biosafe thiol-ene Michael addition reaction.

- Fast gelation via thiol-ene reaction
- Excellent biocompatibility
- Injectable & easy handling
- Suitable for drug delivery & tissue engineering

Technical Highlight

Form
Lyophilised porous sponge (solid)

Solubility
Water, PBS

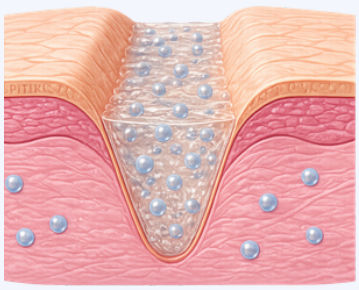
Biocompatibility
Non-cytotoxic material

Application
Hydrogel formation, bioinks, drug delivery systems

Grade
R&D or GMP-like

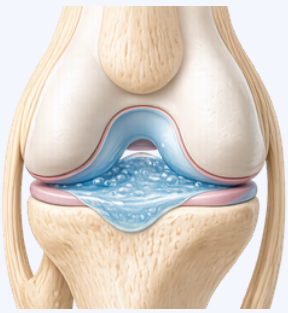
In vivo application example

Wound Healing



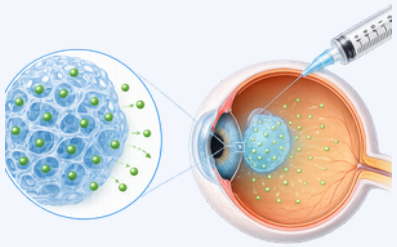
Hydrogel loaded with stem cells accelerates tissue repair in vivo.

Cartilage Regeneration



Hydrogel supports cartilage repair and enhances tissue integration.

Drug Delivery



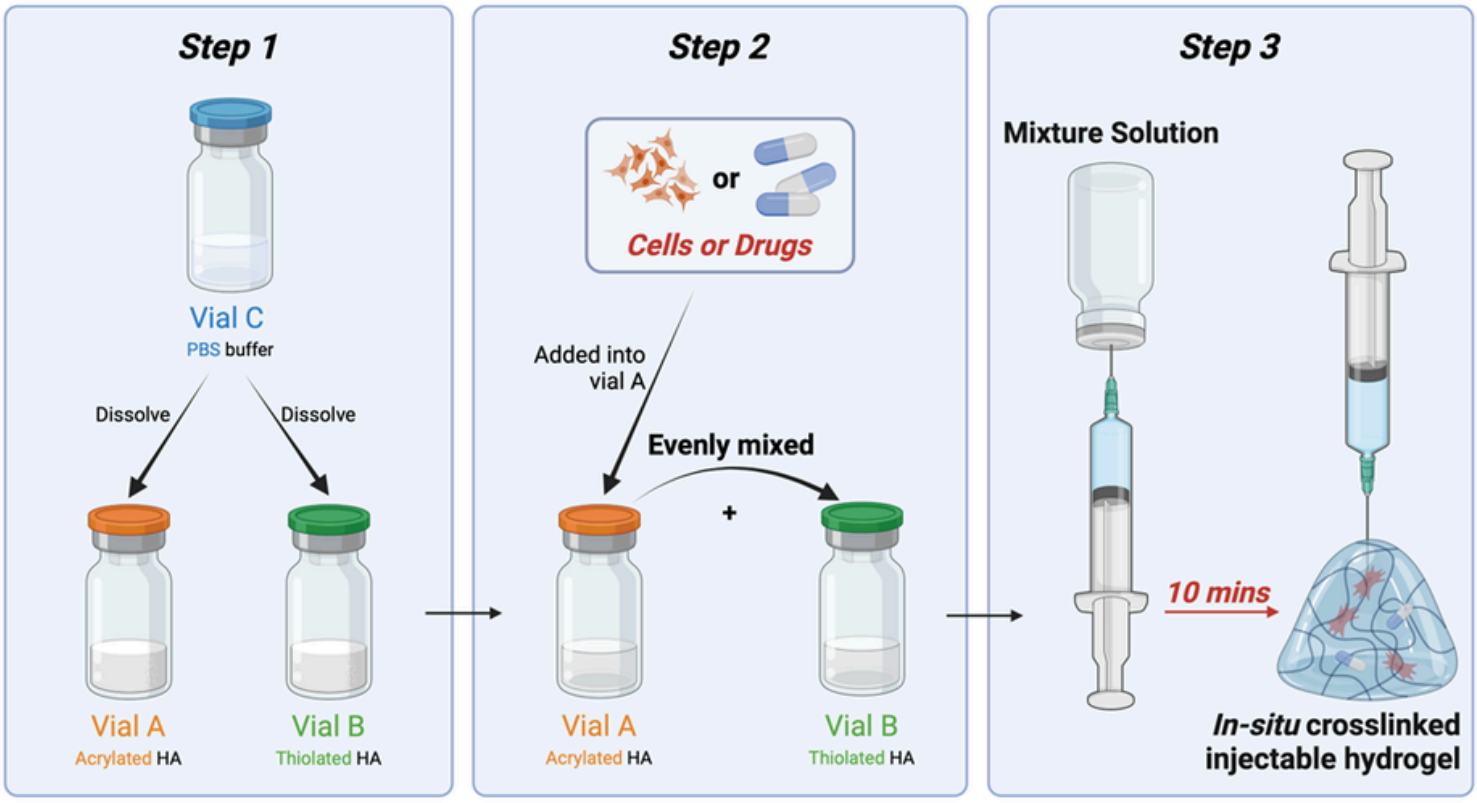
Enables sustained release for long-acting therapeutic effects.

Aesthetic Filling

Injectable hydrogel for soft tissue augmentation

Our GMP-like products are manufactured in an ISO 7 cleanroom operated in compliance with ISO 13485 certified by LRQA

How to Use



Step 1 – Prepare

Equilibrate all components to room temperature.

Step 2 – Dissolve

Dissolve each HA component in the supplied buffer.

(Cells or bioactive agents may be added if required.)

Step 3 – Mix & Gel

Mix both solutions to initiate in situ gelation.

A stable injectable hydrogel forms rapidly.

*No external catalyst required ▪ Mild reaction conditions ▪ Cell-friendly

Notes

- Use the hydrogel immediately after gelation begins.
- For cell-based applications, sterile filtration prior to mixing is recommended.

Specifications

Catalogue Number	Gel Volume	Content
HAK01	1 mL	HA-A (15 mg) + HA-SH (5 mg)
HAK02	2 mL	HA-A (30 mg) + HA-SH (10 mg)
HAK03	3 mL	HA-A (45 mg) + HA-SH (15 mg)
HAK04	4 mL	HA-A (60 mg) + HA-SH (20 mg)

This kit contains the following high-quality components, each manufactured under strict quality control:

- **Acryloyl-Modified Hyaluronic Acid (HA-A)**

  Degree of substitution (DS): 10%

- **Thiol-Modified Hyaluronic Acid (HA-SH)**

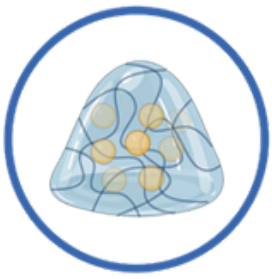
  Degree of substitution (DS): 30%

- **Phosphate-Buffered Saline (PBS)**

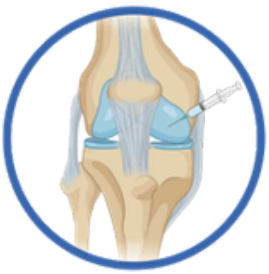
  A dedicated buffer system for component dissolution and preparation, ensuring stability and batch-to-batch reproducibility.

Application

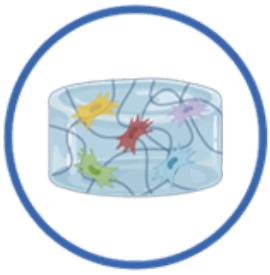
Dermal Fillers



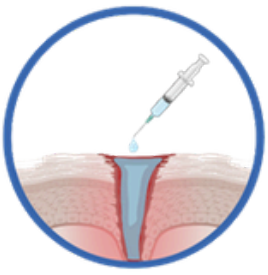
Drug Delivery



Tissue Engineering Materials



Cell Scaffolds



Wound Sealants

Please enquire for more information on Bláfar Ltd biomaterials and customised services.

Find out more

Enquire here