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Product Information

TrueGel3D Crosslinker
CD cell-degradable crosslinker

Catalog Number **TRUECD**
Storage Temperature –70 °C

Product Description

The CD cell-degradable crosslinker consists of thiol groups at each end of polyethylene glycol which react with a polymer (dextran and PVA) to encapsulate cells in a hydrogel. It is also composed of matrix metallo-proteinase (MMP)-cleavable peptide (Pro-Leu-Gly-Leu-Trp-Ala) that allows cells to spread and migrate by secreting matrix metalloproteinases (MMP1, MMP3, MMP7, and MMP9). CD based crosslinkers are suitable for biological applications because they do not elicit an immune response.

The chemically defined hydrogel formed from CD cell-degradable crosslinker allows complete control over gel stiffness. The polymers are transparent and mimic the natural extracellular matrix environment.

Components

- CD cell-degradable crosslinker, lyophilized — 200 μL
  Each tube contain 20 mmol/L of reactive groups
  Catalog Number TRU-CD

- Water — 600 μL
  Catalog Number TRUWA

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

- Centrifuge the vial to make sure entire material is at the bottom of the tube.
- Add 188 μL of water to make a concentration of 20 mmol/L thiol groups.
- Vortex until all material is dissolved.
- Incubate at room temperature for 5 minutes.
- Vortex and centrifuge the tube.
- CD cell-degradable crosslinker is now ready to use.

Storage/Stability

- The lyophilized powders may be stored unopened in the original bottles at –70 °C for up to one year.
- Do not expose the CD cell-degradable crosslinker/ RGD peptide to air longer than necessary to avoid oxidation of thiol groups. After reconstitution, it can be stored at –20 °C or –70 °C.
- Water can be stored between –70 °C and room temperature.

Reference

1. Knight, C.G. et al., A novel coumarin-labelled peptide for sensitive continuous assays of the matrix metalloproteinases. *FEBS Lett.,* **296**, 263-266 (1992).

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