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Product Information

TrueGel3D Polymer
Modified for fast gelling (FAST-DEXTRAN), allows cell recovery

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

Product Description

FAST-DEXTRAN polymer is a natural degradable polymer functionalized with maleimide thiol-reactive groups, which react rapidly with crosslinkers (PEG or CD cell-degradable crosslinker) to form biomimetic hydrogels in few seconds. The TrueGel3D buffer, pH 5.5, provided in the kit ensures homogenous mixing of polymer and crosslinker by slowing down gel formation and simultaneously controlling osmotic conditions. Most cells are not affected by a short exposure to buffer at pH 5.5. TrueGel3D hydrogel formed from dextran polymers are dissolved by treatment of TrueGel3D enzymatic cell recovery solution for post culture analysis.

The chemically defined hydrogel formed from FAST-DEXTRAN polymers allows complete control over gel stiffness. The polymers are transparent and mimic the natural extracellular matrix environment. FAST-DEXTRAN polymers are used when cells need to obtain appropriate medium within a few minutes, or when the application requires fast gelation, as in the case of bioprinting.

Components

- FAST-DEXTRAN 3 × 170 µL
  Lyophilized
  Each tube contain 30 mmol/L of reactive groups
  Catalog Number TRU-FDE

- TrueGel3D buffer, pH 5.5, 10× 600 µL
  Catalog Number TRUBUF-55PH

- Water 4 × 1500 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 175 µL of water to make a 30 mmol/L concentration of maleimide groups.
- Vortex until all material is dissolved.
- Incubate the tube on ice for 5 minutes.
- Briefly vortex and centrifuge the tube.
  Note: Keep on ice while in use.
- FAST-DEXTRAN 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.
- FAST-DEXTRAN is stored at –70 °C after reconstitution.
- Buffers are stored at 4 °C for short term (<2 months) and between –20 °C to –70 °C for long term.
- Water can be stored between –70 °C and room temperature.

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