Product Information

Product name	***3-D Life* Dextran-PEG Hydrogel SG Kit**
Description	The *3-D Life* Dextran-CD Hydrogel SG Kit provides reagents for setting up hydrogels for 3-D cell culture or related applications. Its major components are SG-Dextran and the crosslinker PEG-Link. When the two reagents are combined, thiol groups on PEG-Link form stable thioether bonds with SH-reactive groups on SG-Dextran. The resulting polymer netwok forms a gel. The crosslinking step can be performed in the presence of cells to embed cells in the hydrogel. Prior to the crosslinking step, cell adhesion peptides (e.g. *3-D Life* RGD Peptide, Cat. No. 09-P-001) can be covalently attached to a portion of the SH-reactive groups on SG-Dextran to provide a cell adhesive matrix. The formation of hydrogels is performed at physiological pH for optimal cell compatibility. Gelation starts several minutes after mixing the components at room temperature (compare table in General Protocol GP 2), providing enough time to conveniently manipulate the solution before the onset of gel formation. SG-Dextran hydrogels can be dissolved by the addition of dextranase (*3-D Life* Dextranase, Cat. No. D10-1) to recover chemically fixed or live cells after culture for post-culture analyses (e.g. RT-PCR) or further cultivation. Before using this product please consult the General Protocol GP 2 on www.cellendes.com for setting up SG Hydrogels.
Catalog number	G92-1
Quantity	Allows formation of up to 2 ml *3-D Life* Hydrogel depending on the grade of stiffness of the gel.
Applications	3-D cell culture, hydrogel injections, filling of microchannels, generation of soft to very stiff gels.

Components

	Materials provided[1]	Quantity	Concentration reactive groups	Storage Temperature
	SG-Dextran	170 µl	30 mMol/L	Short term (≤ 2 months): 4°C Long term: -80°C
	PEG-Link, lyophilized	200 µl[2]	20 mMol/L	-20°C or -80°C (lyophilisate and solution)
	10 x CB (pH 7.2)	200 µl	n.a.	Short term (≤ 2 months): 4°C Long term: -20°C or -80°C
	Water	2 x 1500 µl	n.a.	RT to -80°C

[1] All materials are filter-sterilized.
[2] Volume after reconstitution of lyophilisate.

Reconstitution of lyophilisates

PEG-Link:

- Bring lyophilisate to room temperature.
- Briefly centrifuge vial to make sure that the entire material is at the bottom of the centrifuge tube.
- Add 188 µl water for a concentration of 20 mMol/L thiol groups. This results in a 200 µl PEG-Link solution.
- Close centrifuge tube and vortex briefly.
- Wait 5 min or until all material is dissolved.
- Briefly vortex and centrifuge again.

NOTE

INTENDED FOR RESEARCH USE ONLY. NOT FOR USE IN HUMAN THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.