

Product Data Sheet

Product Name *3-D Life* PVA-PEG Hydrogel

Catalog Number 09-G-001

Description The *3-D Life* PVA-PEG Hydrogel Kit provides reagents for setting up fast gelling, cell-compatible hydrogels. Its major components are polymeric Mal-PVA and PEG-Link. When the two reagents are combined, thiol groups on PEG-Link form stable thioether bonds with maleimide groups on Mal-PVA, which results in the formation of the gel.

Prior to the crosslinking step, peptides (e.g. *3-D Life* RGD Peptide, Cat. No. 09-P-001) can be covalently attached to a portion of the maleimide groups of Mal-PVA to provide a cell-adhesive matrix.

For more information and instructions, please consult the General Protocol GP-1 "Preparation of *3-D Life* Fast Gelling Hydrogels" and the *3-D Life* Hydrogels User Guide on www.cellendes.com.

Quantity Allows formation of up to 2 ml *3-D Life* Hydrogel depending on the stiffness of the gel.

Components

Material	Quantity	Concentration of reactive groups	Storage
● Mal-PVA [#]	170 µl	30 mmol/L maleimide groups	-80°C (avoid frequent freeze-thawing)
● PEG-Link, lyophilized	200 µl*	20 mmol/L* thiol groups	Lyophilisate and after reconstitution: -20°C to -80°C
● 10x CB (pH 5.5)	200 µl	n.a	Short term (≤2 months): 4°C Long term: -20°C to -80°C
● 10x CB (pH 7.2)	200 µl	n.a.	Short term (≤2 months): 4°C Long term: -20°C or lower
● Thioglycerol	180 µl	20 mmol/L	-20°C or lower
○ Water	2x 1500 µl	n.a	Room temperature or lower

All materials are filter-sterilized.

[#]Keep on ice while in use.

*Volume/concentration after reconstitution of lyophilisate.

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Reconstitution PEG-Link:

1. Briefly centrifuge vial containing the PEG-Link lyophilisate to make sure that the entire material is at the bottom of the reaction tube.
2. Add 188 μ l 3-D Life Water per tube for a concentration of 20 mmol/L thiol groups. This results in a 200 μ l PEG-Link solution.
3. Close tube and briefly vortex.
4. Incubate for 5 min.
5. Briefly vortex and centrifuge again.
6. PEG-Link is now ready for use.

Intended for research use only. Not for use in human therapeutic or diagnostic applications.