

Product Data Sheet

Product Name *3-D Life* CD-HyLink

Catalog Number L80-3

Description The CD-HyLink molecule consists of hyaluronic acid carrying thiol groups along its backbone. When combined with SG-Dextran of the *3-D Life* Hydrogel system, thiol groups on CD-HyLink form stable thioether bonds with the thiol-reactive groups on the polymer, which results in the formation of the hydrogel. CD-HyLink contains a matrix metalloproteinase (MMP)-cleavable peptide sequence (Pro-Leu-Gly-Leu-Trp-Ala), which is cleaved by a broad range of MMPs including MMP1, MMP2, MMP3, MMP7, MMP9 and MMP13 [1, 2, 3]. It allows cells to locally degrade the polymer network.

Note: Dextran hydrogels crosslinked with CD-HyLink cannot be dissolved by the addition of dextranase (*3-D Life* Dextranase, Cat. No. D10-1).

For using this product please consult General Protocol GP-4B "Preparation of *3-D Life* Hyaluronic Acid (CD-HA) Hydrogels containing a matrix metalloproteinase cleavage site" and the *3-D Life* Hydrogels User Guide on www.cellendes.com.

Quantity Sufficient for 4.8 ml hydrogel of a crosslinking strength of 1.2 mmol/l when used with SG-Dextran of the *3-D Life* Hydrogel system.

Components

Material	Quantity	Concentration of reactive groups	Storage
 CD-HyLink, freeze-dried	3x 200 µL	10 mmol/L* thiol groups	Lyophilisate and after reconstitution: -70°C
 Water	600 µl	n/a	Room temperature or lower

All materials are filter-sterilized.

*Volume/concentration after reconstitution of lyophilisate.

Reconstitution

1. Briefly centrifuge vial containing CD-HyLink lyophilisate to make sure that the entire material is at the bottom of the reaction tube.
2. Add 188 µl *3-D Life* Water for a concentration of 10 mmol/L thiol groups.
3. Close tube and briefly vortex.
4. Incubate for 60 min at room temperature.
5. Briefly vortex and centrifuge again.
6. CD-HyLink is now ready for use.

Notes After reconstitution, CD-HyLink is a viscous solution. Low binding pipet tips are recommended for accurate pipetting of up to 20 µl. For volumes above 20 µl use wide orifice pipet tips.

References

[1] Knight, C. G. et al. FEBS 296:263-66 (1992)
[2] Patterson, J. and Hubbell, J. A. Biomaterials 31, 7836-7845 (2010)
[3] Deng, S. et al. J. Biol. Chem. 275, No. 40, 31422–31427 (2000)

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