

Product Data Sheet

Product Name	ToLuminate N-Dextran																				
Catalog Number	M93-2																				
Description	<p>ToLuminate N-Dextran is a component of the ToLuminate Hydrogel system. It contains norbornene-functionalized dextran (N-Dextran) that can be used together with 3-D Life crosslinkers PEG-Link (Cat. No. L50-1 or L50-3), CD-Link (Cat. No. L60-1 or L60-3), HyLink (Cat. No. L70-1 or L70-3) or CD-HyLink (L80-1 or L80-3) to set up hydrogels formed by illumination with blue light (365-405 nm) on the basis of the thiol-ene chemistry. In addition, the set contains the photoinitiator LAP (Lithium phenyl-2,4,6-trimethyl-benzoylphosphinate) required for photocrosslinking and a phenol red-free 10x buffer solution compatible with light-dependent crosslinking.</p> <p>When N-Dextran is combined with crosslinker and illuminated in the presence of LAP, thiol groups on the crosslinker are activated and form stable thioether bonds with norbornene groups on N-Dextran.</p> <p>When crosslinked with PEG-Link or CD-Link, dextran-based ToLuminate Hydrogels can be dissolved by the addition of dextranase (3-D Life Dextranase, Cat. No. D10-1), which allows the recovery of chemically fixed or live cells for post-culture analyses (e.g. RT-PCR) or for further cultivation.</p> <p>The 10x CB (pH 7.2) Phenol Red-free is a buffer solution to control pH and osmotic conditions during gel formation in the presence of cells.</p> <p>For more information and instructions, please consult the General Protocol GP-5 "Preparation of ToLuminate Photogels".</p>																				
Quantity	<p>Without peptide modification:</p> <ul style="list-style-type: none"> Up to 18 mL hydrogel at a crosslinking strength of 2 mmol/L (used for crosslinking with HyLink or CD-HyLink). Up to 12 mL hydrogel at a crosslinking strength of 3 mmol/L (used for crosslinking with PEG-Link or CD-Link). <p>The hydrogel volume will be reduced, if peptide modifications are added.</p>																				
Components	<table border="1"> <thead> <tr> <th>Material</th><th>Quantity</th><th>Concentration of reactive groups</th><th>Storage</th></tr> </thead> <tbody> <tr> <td> N-Dextran</td><td>2x 600 µl</td><td>30 mmol/L</td><td>-20°C to -80°C</td></tr> <tr> <td> 10x CB (pH 7.2) Phenol Red-free</td><td>2x 600 µl</td><td>n/a</td><td>Short term (≤2 months): 4°C Long term: -20°C to -80°C</td></tr> <tr> <td> LAP, 10 mM</td><td>2x 600 µl</td><td>10 mmol/L</td><td>-20°C to -80°C</td></tr> <tr> <td> Water</td><td>3x 1500 µl</td><td>n.a</td><td>Room temperature or lower</td></tr> </tbody> </table>	Material	Quantity	Concentration of reactive groups	Storage	 N-Dextran	2x 600 µl	30 mmol/L	-20°C to -80°C	 10x CB (pH 7.2) Phenol Red-free	2x 600 µl	n/a	Short term (≤2 months): 4°C Long term: -20°C to -80°C	 LAP, 10 mM	2x 600 µl	10 mmol/L	-20°C to -80°C	 Water	3x 1500 µl	n.a	Room temperature or lower
Material	Quantity	Concentration of reactive groups	Storage																		
 N-Dextran	2x 600 µl	30 mmol/L	-20°C to -80°C																		
 10x CB (pH 7.2) Phenol Red-free	2x 600 µl	n/a	Short term (≤2 months): 4°C Long term: -20°C to -80°C																		
 LAP, 10 mM	2x 600 µl	10 mmol/L	-20°C to -80°C																		
 Water	3x 1500 µl	n.a	Room temperature or lower																		

All materials are filter-sterilized.

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