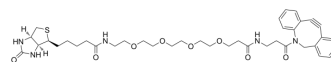


## DBCO-PEG4-Biotin

<b>Cat. No.:</b>	HY-130809
<b>CAS No.:</b>	1255942-07-4
<b>Molecular Formula:</b>	C <sub>39</sub> H <sub>51</sub> N <sub>5</sub> O <sub>8</sub> S
<b>Molecular Weight:</b>	749.92
<b>Target:</b>	Biochemical Assay Reagents
<b>Pathway:</b>	Others
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (133.35 mM; Need ultrasonic)																	
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th rowspan="2">Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>1.3335 mL</td> <td>6.6674 mL</td> <td>13.3348 mL</td> </tr> <tr> <td>5 mM</td> <td>0.2667 mL</td> <td>1.3335 mL</td> <td>2.6670 mL</td> </tr> <tr> <td>10 mM</td> <td>0.1333 mL</td> <td>0.6667 mL</td> <td>1.3335 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg	1 mM	1.3335 mL	6.6674 mL	13.3348 mL	5 mM	0.2667 mL	1.3335 mL	2.6670 mL	10 mM	0.1333 mL	0.6667 mL	1.3335 mL
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10 mM	0.1333 mL	0.6667 mL	1.3335 mL															
	Please refer to the solubility information to select the appropriate solvent.																	
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (3.33 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.33 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (3.33 mM); Clear solution</li> </ol>																	

### BIOLOGICAL ACTIVITY

<b>Description</b>	DBCO-PEG4-Biotin is an azidobenzocyclooctyne-biotin derivative containing a biotin group and 4 PEGs. DBCO-PEG4-Biotin is a versatile biotinylation reagent used for the introduction of a biotin moiety to azide-labeled biomolecules via copper-free strain-promoted alkyne-azide click chemistry (SPAAC) reaction <sup>[1]</sup> . DBCO-PEG4-Biotin is a click chemistry reagent, it contains a DBCO group that can undergo strain-promoted alkyne-azide cycloaddition (SPAAC) with molecules containing Azide groups.
<b>In Vitro</b>	The alkyne group can react with azide moiety in copper-free Click Chemistry reaction to form a stable triazole linkage. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Hammink R, et al. Affinity-Based Purification of Polyisocyanopeptide Bioconjugates. *Bioconjug Chem*. 2017 Oct 18;28(10):2560-2568.
- [2]. Hammink R, et al. Affinity-Based Purification of Polyisocyanopeptide Bioconjugates. *Bioconjug Chem*. 2017 Oct 18;28(10):2560-2568.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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