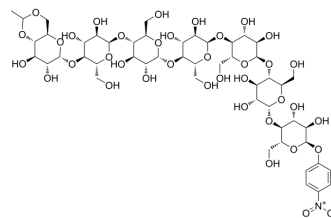


## Ethylidene-4-nitrophenyl- $\alpha$ -D-Maltoheptaoside

<b>Cat. No.:</b>	HY-112835
<b>CAS No.:</b>	96597-16-9
<b>Molecular Formula:</b>	C <sub>50</sub> H <sub>77</sub> NO <sub>38</sub>
<b>Molecular Weight:</b>	1300.13
<b>Target:</b>	Amylases
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (76.92 mM; Need ultrasonic)				
	<b>Preparing Stock Solutions</b>	<b>Solvent</b> \ <b>Concentration</b> \ <b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>1 mM</b>	0.7692 mL	3.8458 mL	7.6915 mL
		<b>5 mM</b>	0.1538 mL	0.7692 mL	1.5383 mL
		<b>10 mM</b>	0.0769 mL	0.3846 mL	0.7692 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: <math>\geq</math> 2.5 mg/mL (1.92 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-<math>\beta</math>-CD in saline) Solubility: <math>\geq</math> 2.5 mg/mL (1.92 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Ethylidene-4-nitrophenyl- $\alpha$ -D-Maltoheptaoside (pNP-G7) is the substrate of $\alpha$ -amylase. Ethylidene-4-nitrophenyl- $\alpha$ -D-Maltoheptaoside can be used to measure $\alpha$ -amylase activity <sup>[1]</sup> .
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### REFERENCES

- [1]. Lorentz K. Routine alpha-amylase assay using protected 4-nitrophenyl-1, 4-alpha-D-maltoheptaoside and a novel alpha-glucosidase. Clin Chem. 2000 May;46(5):644-9.
- [2]. Lorentz K. Routine alpha-amylase assay using protected 4-nitrophenyl-1, 4-alpha-D-maltoheptaoside and a novel alpha-glucosidase. Clin Chem. 2000 May;46(5):644-9.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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