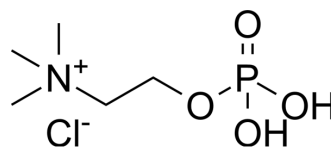


## Phosphorylcholine chloride

<b>Cat. No.:</b>	HY-B2233
<b>CAS No.:</b>	107-73-3
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>15</sub> ClNO <sub>4</sub> P
<b>Molecular Weight:</b>	219.6
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<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>	H <sub>2</sub> O : 250 mg/mL (1138.43 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		4.5537 mL	22.7687 mL	45.5373 mL
		<b>5 mM</b>		0.9107 mL	4.5537 mL	9.1075 mL
<b>10 mM</b>		0.4554 mL	2.2769 mL	4.5537 mL		
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (455.37 mM); Clear solution; Need ultrasonic					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Phosphorylcholine chloride (Phosphocholine chloride) is an antigenic cell-surface component found on many commensal and pathogenic bacteria that reside in the upper airway.	
<b>IC<sub>50</sub> &amp; Target</b>	Microbial Metabolite	Human Endogenous Metabolite
<b>In Vitro</b>	Phosphorylcholine materials are bio-inspired polymers that mimic the extracellular surface of red blood cells, containing an exact chemical copy of the predominant zwitterionic phospholipid headgroup found in the cell lipid membrane. The phosphorylcholine side chain of the PC-polymer contains the phosphate moiety present in phosphatidylcholine and phosphatidylserine, the latter being membrane lipid component that is able to bind calcium and is implicated in biomineralization <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

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## CUSTOMER VALIDATION

- Nat Commun. 2023 Mar 24;14(1):1631.
- NPJ Biofilms Microbiomes. 2023 Sep 4;9(1):62.
- JCI Insight. 2021 Sep 7;151911.
- J Physiol Biochem. 2022 Jan 20.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Lawton JM, et al. The effect of cationically-modified phosphorylcholine polymers on human osteoblasts in vitro and their effect on bone formation in vivo. J Mater Sci Mater Med. 2017 Aug 17;28(9):144.

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

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