

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

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# **PRODUCT** INFORMATION



#### CoPoP

Item No. 36128

CAS Registry No.:		
Formal Name:	(SP-4-2)-[(7R)-7-[3-[(3S,4S)-9-ethenyl-	
	14-ethyl-4,8,13,18-tetramethyl-20-oxo-	
	3-phorbinyl-кN23,кN24,кN25,кN26]-	
	1-oxopropoxy]-4-hydroxy-N,N,N-	$\mathbf{y}$
	trimethyl-10-oxo-3,5,9-trioxa-4-	
	phosphapentacosan-1-aminium	
	4-oxidato(3-)]-cobalt	
Sum and man		
Synonym:	Cobalt Porphyrin-Phospholipid	, 8
MF:	C <sub>57</sub> H <sub>80</sub> CoN <sub>5</sub> O <sub>9</sub> P	
FW:	1,069.2	j. to
Purity:	≥90%	, MALE AND
UV/Vis.:	λ <sub>max</sub> : 431 nm	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥2 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

CoPoP is supplied as a solid. A stock solution may be made by dissolving the CoPoP in the solvent of choice, which should be purged with an inert gas. CoPoP is soluble in ethanol and methanol.

#### Description

CoPoP is a phosphatidylcholine containing palmitic acid (Item No. 10006627) at the sn-1 position and cobalt-bound porphyrin at the sn-2 position.<sup>1</sup> It has been used in the generation of liposomes in which cobalt in the porphyrin moiety located in the hydrophobic bilayer coordinates with the imidazole group in histidine residues to capture His-tagged proteins and peptides. Liposomes containing CoPoP bound to a His-tagged form of the HIV glycoprotein 41 (gp41) envelope protein membrane proximal external region (MPER) and encapsulating the toll-like receptor 4 (TLR4) agonist monophosphoryl lipid A induces viral titers in immunocompetent, but not athymic, mice, which is further increased by a booster injection indicating a T cell-mediated memory response. Liposomes containing CoPoP bound to other His-tagged peptides and other factors have been used to reduce tumor growth and metastasis in murine cancer models and parasite transmission in a P. falciparum-induced mouse model of malaria, as well as to induce neutralizing antibodies in mice and rabbits in models of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.<sup>2-4</sup>

#### References

- 1. Shao, S., Geng, J., Ah Yi, H., et al. Functionalization of cobalt porphyrin-phospholipid bilayers with his-tagged ligands and antigens. Nat. Chem. 7(5), 438-446 (2015).
- He, X., Zhou, S., Huang, W.-C., et al. A potent cancer vaccine adjuvant system for particleization of short, 2 synthetic CD8<sup>+</sup> T cell epitopes. ACS Nano 15(3), 4357-4371 (2021).
- 3 Huang, W.-C., Deng, B., Seffouh, A., et al. Antibody response of a particle-inducing, liposome vaccine adjuvant admixed with a Pfs230 fragment. NPJ Vaccines 5(1), 23 (2020).
- Huang, W.-C., Zhou, S., He, X., et al. SARS-CoV-2 RBD neutralizing antibody induction is enhanced by 4 particulate vaccination. Adv. Mater. 32(50), e2005637 (2020).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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