

Phospholipids

Naturally-derived Phospholipids

Lecithin from Egg

25g / 100g [L0022]

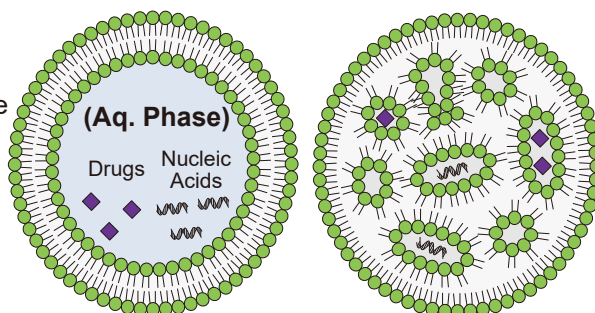
Lecithin from Soybean

25g / 500g [L0023]

Phospholipids for Liposomes / Lipid Nanoparticles

Liposomes

- Vesicles comprised of an inner aqueous phase encapsulated by a lipid bilayer.



Lipid Nanoparticles

- Small, solid lipid particles with a more complex inner structure than liposomes.
- Perfect for use with payloads which are unstable in aqueous solution.

- Encapsulates and protects cargo (pharmaceuticals, nucleic acids, proteins, etc.) for delivery to cells.
- Varying composition allows for tunable biocompatibility, molecular targeting, and improved stability.

Lipid Mixture for Easy Preparation of Liposomes

Presome® ACD-1

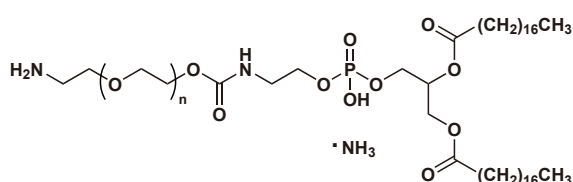
100mg [P2807]

- Advantages**
- Homogeneous 3:1:1 mixture of Hydrogenated Soy Phospholipid : Cholesterol : MPEG2000-DPSE
 - Allows for quick and easy preparation of liposomes without the use of organic solvents. Just mix and stir with an aqueous solution of the substance to be encapsulated.

References

Nippon Fine Chemical Website <https://www.nipponseika.co.jp/en/business/healthcare/presome/>
N. Maeda, K. Ikeda, M. Matsumoto, Y. Namba, *J. Liposome Res.* **2017**, 27, 221. <https://doi.org/10.1080/08982104.2016.1224898>

PEGylated Phospholipids



DSPE-PEG(2000)-Amine Ammonium Salt

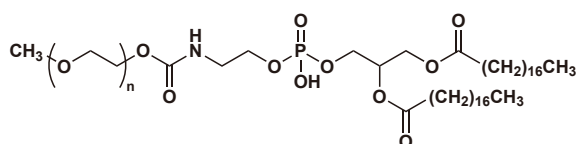
10mg

[D6011]

- Advantages**
- Optimal for both the self-assembly of liposomes and the preparation of lipid nanoparticles.
 - Excellent biocompatibility due to the presence of PEG groups on the liposomal/nanoparticle surface.
 - Allows for easy conjugation to your molecule-of-interest via the terminal amino group.

References

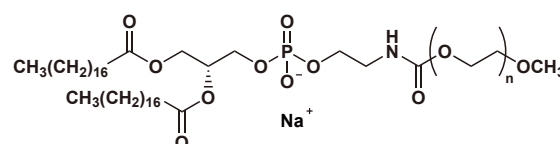
S. Biswas, V. P. Torchilin, *et al.*, *J. Control. Release* **2012**, 159, 393. <https://doi.org/10.1016/j.jconrel.2012.01.009>
H. J. Kwon, T. Hyeon, I. Mook-Jung, *et al.*, *ACS Nano* **2016**, 10, 2860. <https://doi.org/10.1021/acsnano.5b08045>
B. Li, D. Gao, C. Xing, *et al.*, *Adv. Healthc. Mater.* **2022**, 11, 2102506. <https://doi.org/10.1002/adhm.202102506>



Methyl-PEG2000-DSPE

250mg

[M3264]

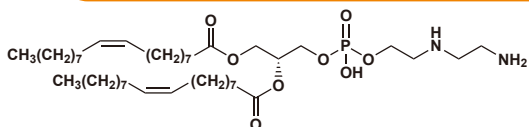


MPEG2000-DSPE Sodium Salt

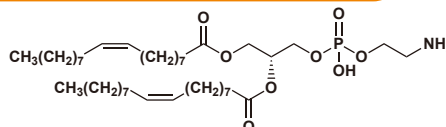
100mg

[M3330]

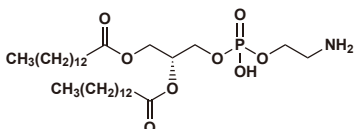
Other Phospholipids



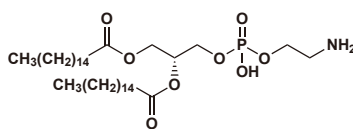
DOP-DEDA
50mg
[D6219]



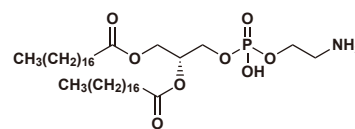
DOPE
250mg
[D4251]



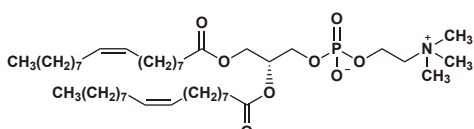
L-DMPE
250mg
[D4249]



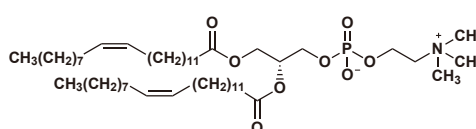
L-DPPE
250mg
[D4213]



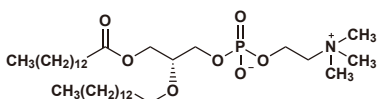
DSPE
250mg
[D4214]



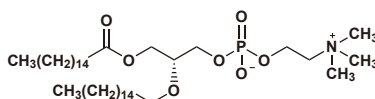
DOPC
250mg / 1g
[D4250]



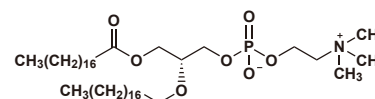
DEPC
250mg
[D5319]



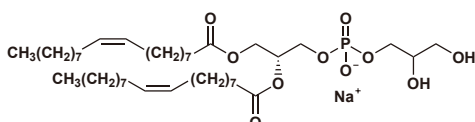
DMPC
200mg / 1g
[D3924]



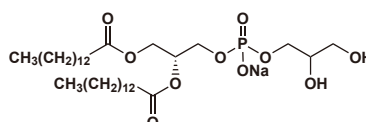
L-DPPC
200mg / 1g
[D3925]



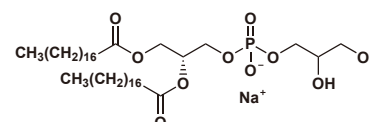
DSPC
200mg / 1g
[D3926]



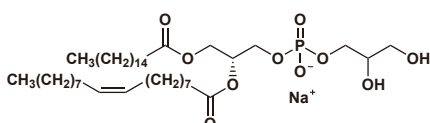
DOPG Sodium Salt
250mg
[D5318]



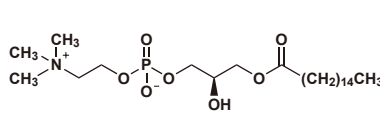
DMPG Sodium Salt
1g
[D3946]



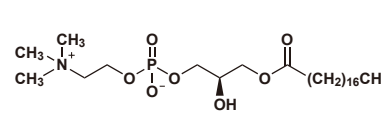
DSPG Sodium Salt
250mg
[D5648]



POPG Sodium Salt
250mg
[P2522]



1-Palmitoyl-*sn*-glycero-3-phosphocholine
250mg
[P2694]



1-Stearoyl-*sn*-glycero-3-phosphocholine
250mg
[T3808]

For further information please refer to our website at www.TCIchemicals.com.

TCI phospholipids



Ordering and Customer Service

TCI AMERICA

Tel : 800-423-8616 / 503-283-1681
Fax : 888-520-1075 / 503-283-1987
E-mail : Sales-US@TCIchemicals.com

TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00
Fax : +49 (0)6196 64053-01
E-mail : Sales-DE@TCIchemicals.com

Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 78 45 60
E-mail : Sales-UK@TCIchemicals.com

梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386
Fax : 021-6712-1385
E-mail : Sales-CN@TCIchemicals.com

Tokyo Chemical Industry (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909
E-mail : Sales-IN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878
E-mail : globalbusiness@TCIchemicals.com

* Chemicals itemized in this brochure are for research and testing use only. Please avoid use other than by chemically knowledgeable professionals. * Information such as listed products and its specifications and so on are subject to change without prior notice. * The contents may not be reproduced or duplicated in whole or in part without permission of Tokyo Chemical Industry Co., Ltd.