

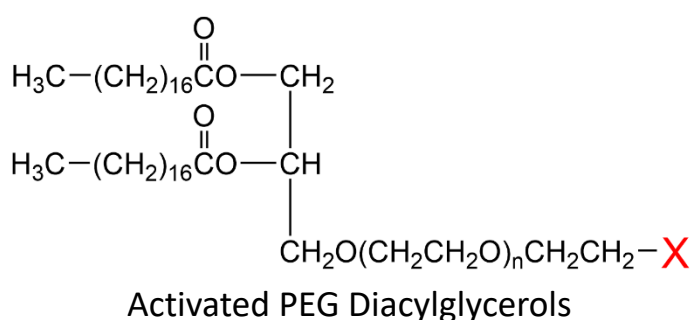
Activated PEG-Lipids for Targeting Lipid Nanoparticles

- SUNBRIGHT® Series -

Non-charged PEG-lipids with active groups

For specific delivery, nanoparticles modified with ligands are widely used. Conventional modifying agents, such as activated PEG-phospholipids, have an ionic-charge. It is complicated to apply them to lipid nanoparticles (LNP), as they have a negative impact on a charge and stability of LNP.

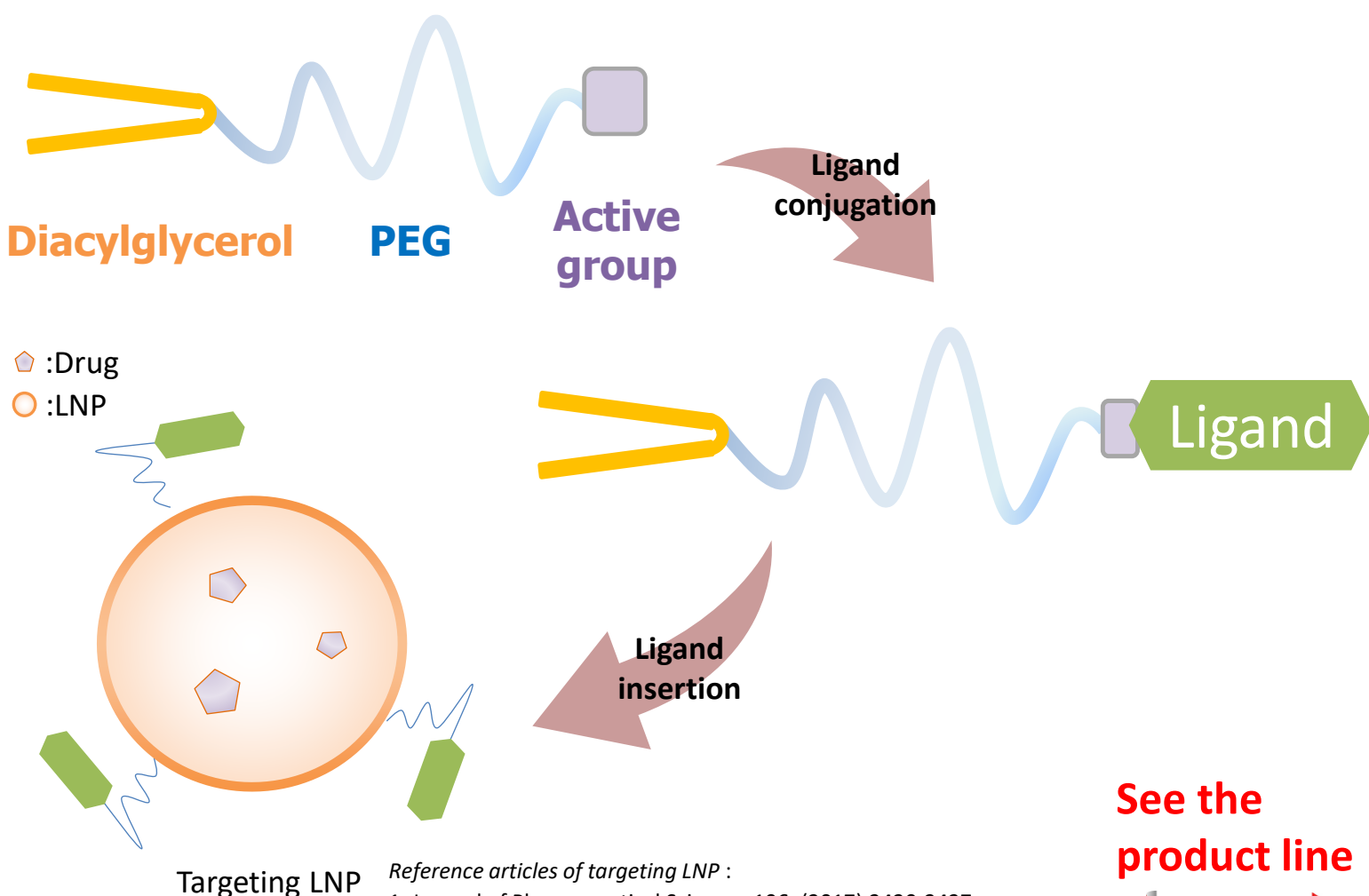
NOF newly developed non-charged PEG-lipids with active groups "Activated diacylglycerol-PEG". The lipids can introduce ligands on LNP without influence on the charge of LNP. This feature is effective for targeting LNP aiming for nucleic acid delivery.



Non-charged

Active group
for ligand conjugation

The surface modification of LNP



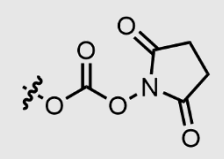
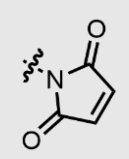

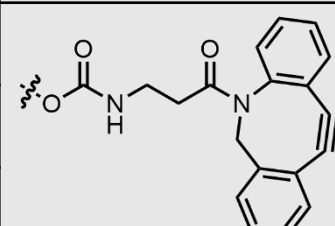
Reference articles of targeting LNP :

1. Journal of Pharmaceutical Sciences 106, (2017) 2420-2427
2. Journal of Controlled Release 349 (2022) 379-387

See the
product line



Products

Product name	Another name	PEG MW	X
SUNBRIGHT®GS-020TS	DSG-PEG2000-NHS	2,000	
SUNBRIGHT®GS-034TS	DSG-PEG3400-NHS	3,400	
SUNBRIGHT®GS-050TS	DSG-PEG5000-NHS	5,000	
SUNBRIGHT®GS-020MA	DSG-PEG2000-Maleimide	2,000	
SUNBRIGHT®GS-034MA	DSG-PEG3400-Maleimide	3,400	
SUNBRIGHT®GS-050MA	DSG-PEG5000-Maleimide	5,000	
SUNBRIGHT®GS-020AZ	DSG-PEG2000-Azide	2,000	
SUNBRIGHT®GS-034AZ	DSG-PEG3400-Azide	3,400	
SUNBRIGHT®GS-050AZ	DSG-PEG5000-Azide	5,000	
SUNBRIGHT®GS-020DB2*	DSG-PEG2000-DBCO	2,000	
SUNBRIGHT®GS-034DB2*	DSG-PEG3400-DBCO	3,400	
SUNBRIGHT®GS-050DB2*	DSG-PEG5000-DBCO	5,000	

* make-to-order

NOF can offer a variety of customized products for LNP application.

- ✓ PEG lipids (PEG molecular weights, acyl chain lengths)
- ✓ Activated PEG lipids
- ✓ Ionizable lipids



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