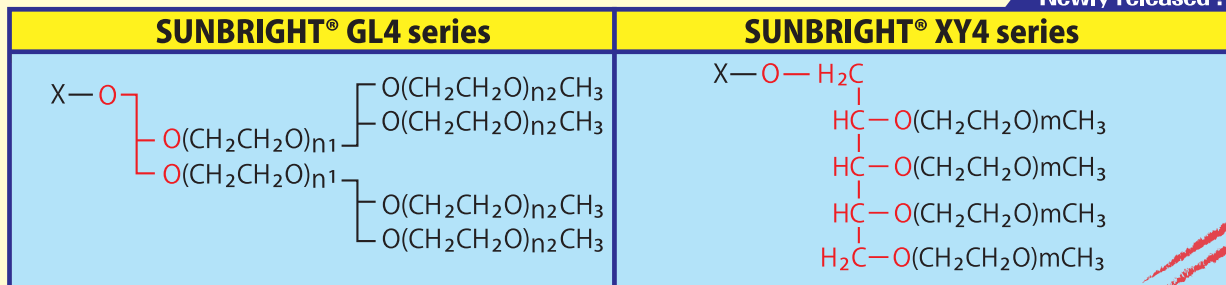


## Proprietary Branched PEG <SUNBRIGHT® GL4, XY4 series>

Newly released !



Above two novel 4-arm Branched PEGs can be worked for lower viscosity PEG-Drug formulation with high drug efficiency, even their higher molecular weights.

### Viscosity of Each Activated PEG (Linear, 2-arm and 4-arm)

Compound	Structure	Viscosity
MeO-PEG(40kDa)	Linear	19.3
GL2(40kDa)	2-arm	18.8
GL4(40kDa)	4-arm	10.9

\*as aqueous solution at 10 wt%

### 4-Branched PEG <SUNBRIGHT® GL4 series>

Product Name	Functional Group	Molecular Weight
SUNBRIGHT® GL4-400NP	p-Nitrophenylcarbonate -CO <sub>2</sub> -phenyl-NO <sub>2</sub>	40,000
GL4-600NP		60,000
GL4-800NP		80,000
SUNBRIGHT® GL4-400TS	Succinimidylcarboxy -COO-NHS	40,000
GL4-600TS		60,000
GL4-800TS		80,000
SUNBRIGHT® GL4-400PA	Propylamine -CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>	40,000
GL4-600PA		60,000
GL4-800PA		80,000
SUNBRIGHT® GL4-400MA	Maleimide -(CH <sub>2</sub> ) <sub>3</sub> -NHCO-CH <sub>2</sub> CH <sub>2</sub> -Maleimide	40,000
GL4-600MA		60,000
GL4-800MA		80,000
SUNBRIGHT® GL4-400GS2	Succinimidylglutamate-aminopropyl -CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> -NH-CO-(CH <sub>2</sub> ) <sub>3</sub> -COO-NHS	40,000
GL4-600GS2		60,000
GL4-800GS2		80,000
SUNBRIGHT® GL4-400AL3	Aldehyde -CONH-CH <sub>2</sub> CH <sub>2</sub> -CHO	40,000
GL4-600AL3		60,000
GL4-800AL3		80,000
SUNBRIGHT® GL4-400CA	Aminoxy -CONH-CH <sub>2</sub> CH <sub>2</sub> -ONH <sub>2</sub>	40,000
GL4-600CA		60,000
GL4-800CA		80,000

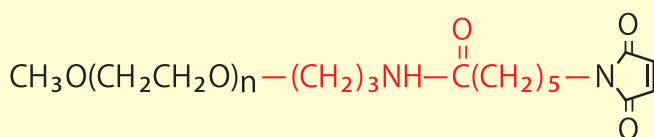
### 4-Branched PEG <SUNBRIGHT® XY4 series>

Product Name	Functional Group	Molecular Weight
SUNBRIGHT® XY4-200NP	p-Nitrophenylcarbonate -CO <sub>2</sub> -phenyl-NO <sub>2</sub>	20,000
XY4-400NP		40,000
SUNBRIGHT® XY4-200TS	Succinimidylcarboxy -COO-NHS	20,000
XY4-400TS		40,000
SUNBRIGHT® XY4-200MA	Maleimide -(CH <sub>2</sub> ) <sub>3</sub> -NHCO-CH <sub>2</sub> CH <sub>2</sub> -Maleimide	20,000
XY4-400MA		40,000
SUNBRIGHT® XY4-200GS2	Succinimidylglutamate-aminopropyl -CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> -NH-CO-(CH <sub>2</sub> ) <sub>3</sub> -COO-NHS	20,000
XY4-400GS2		40,000
SUNBRIGHT® XY4-200AL	Aldehyde -CH <sub>2</sub> CH <sub>2</sub> -CHO	20,000
XY4-400AL		40,000

# High Quality Activated PEG



## Maleimide PEG <SUNBRIGHT® MA series>



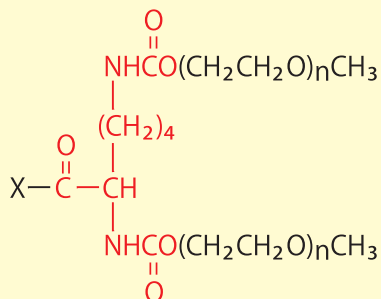
### New Linear mPEG C5 Maleimide <SUNBRIGHT® MA3 series>

Product Name	Functional Group	Molecular Weight
SUNBRIGHT® ME-050MA3	Maleimide -(CH <sub>2</sub> ) <sub>3</sub> -NHCO-(CH <sub>2</sub> ) <sub>5</sub> -Maleimide	5,000
ME-120MA3		12,000
ME-200MA3		20,000
ME-400MA3		40,000

### New 2-Branched mPEG C5 Maleimide <SUNBRIGHT® GL2 MA3 series>

Product Name	Functional Group	Molecular Weight
SUNBRIGHT® GL2-400MA3	Maleimide -(CH <sub>2</sub> ) <sub>3</sub> -NHCO-(CH <sub>2</sub> ) <sub>5</sub> -Maleimide	40,000

## Lysine Branched PEG <SUNBRIGHT® LY series>



These PEGs are licensed  
from ENZON Pharmaceuticals.



### 2- Branched Lysine PEG <SUNBRIGHT® LY series>

Product Name	Functional Group	Molecular Weight
SUNBRIGHT® LY-400MA	Maleimide -(CH <sub>2</sub> ) <sub>3</sub> -NHCO-CH <sub>2</sub> CH <sub>2</sub> -Maleimide	40,000
SUNBRIGHT® LY-400AL3	Aldehyde -CONH-CH <sub>2</sub> CH <sub>2</sub> -CHO	40,000
SUNBRIGHT® LY-400NS	-COO-NHS	40,000



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