

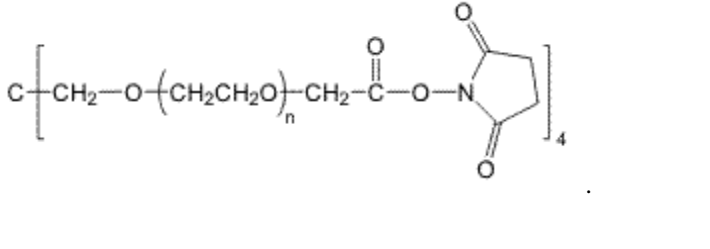
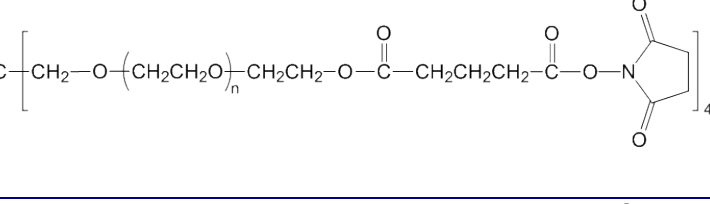
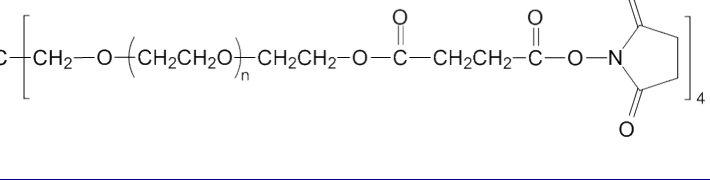
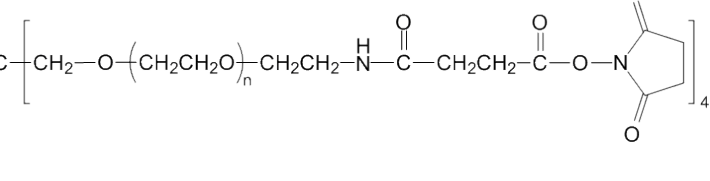
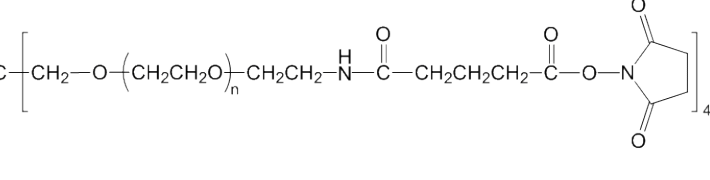
FT- WU1191

4-Arm branched Pegylation agents

> 4Arms-PEG-Succinimidyl esters

Presentation:

- Compared with other spacers, PEG structure increases water-solubility and stability. It also can reduce immunogenicity of conjugates and suppress the non-specific binding of charged molecules to the modified surfaces.
- Succinimidyl ester reacts with amines in mild conditions.

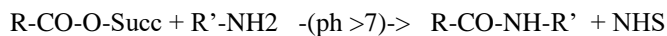
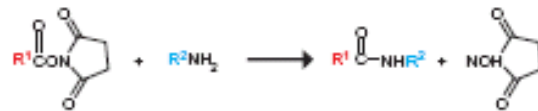
Product name synonymes	Cat.number Qty 0-250mg, 1-1g 2-5g	MW (g·mol ⁻¹)	Structure
• Succinimidyl (Amine reactive)			
4Arms-PEG – SCM Ester Arm4-PEG-Succinimidyl CarboxyMethyl ester, PEG- NHS PG4A-NS ^(M/L) [B][N]	AWJI8- AWJI7- AWJI61 AWJI51 WU1191 WU1201	350 to 750Da 1 000 2 000 5 000 10 000 20 000 30 000 40 000	
4Arms-PEG – SG Ester Arm4-PEG-Succinimidyl Glutarate ester ^(M/L) [B][-]	A2TY61 A2TY71 A2TY81 A2TY91	2 000 5 000 10 000 20 000	
4Arms-PEG – SS Ester Arm4-PEG-Succinimidyl Succinate ester ^(M/L) [B][-]	A2TYA1 A2TYB1 A2TYC1 A2TYD1	2 000 5 000 10 000 20 000	
4Arms-PEG – SAS Ester Arm4-PEG-Succinamide Succinimidyl ester ^(M/L) [B][-]	A2TYI1 A2TYJ1 A2TYK1 A2TYL1	2 000 5 000 10 000 20 000	
4Arms-PEG – GAS Ester Arm4-PEG-Glutaramide Succinimidyl ester ^(M/L) [B][-]	A2TYE1 A2TYF1 A2TYG1 A2TYH1	2 000 5 000 10 000 20 000	

Store at -20°C ^(M)(+4°C possible for short term^(L)). Keep in dry and avoid sunlight.

FT- WU1191

Functional groups information (reactivity):

See more information at NT-XLfctI



Succinimidyl ester

Carbosamide

Comparison of reactivity of various PEG reagents as measured by hydrolysis half-lives at pH 8, 25°C, measured by UV absorbance of the hydrolyzed succinimidyl group(NHS) . Aminolysis rates parallel hydrolysis rates.

NHS Ester structure	Ester name (Symbol)	Hydrolysis half-live (minutes) at pH 8, 25°C
Esters of monoacids:		
-O-COO-NHS	Carbonate Succinimidyl ester (SC)	20.4 min
-O-CH ₂ -COO-NHS	CarboxyMethyl Succinimidyl ester (SCM)	0.75 min
-O-CH ₂ CH ₂ -COO-NHS	Propionate Succinimidyl ester (SPA)	16.5 min
-O-CH ₂ CH ₂ CH ₂ CH ₂ -COO-NHS	Valerate Succinimidyl ester (SVA)	33.6 min (a)
Esters of diacids:		
-O-CO-CH ₂ CH ₂ CH ₂ -COO-NHS	Glutarate Succinimidyl ester (SG)	7.6 min
-O-CO-CH ₂ CH ₂ -COO-NHS	Succinate Succinimidyl ester (SS)	9.8 min
With an amide link:		
-NH-CO-CH ₂ CH ₂ -COO-NHS	Succinamide Succinimidyl ester (SAS)	
-NH-CO-CH ₂ CH ₂ CH ₂ -COO-NHS	Glutaramide Succinimidyl ester (GAS)	

(a)33.6min at pH8.0, 9.6min at pH8.5, 3.1min at pH9.0 and ~56 seconds at pH10.0.

Physical Properties:

- Soluble in regular aqueous solution as well as most organic solvents: water, ethanol, chloroform, DMSO, etc

Storage Conditions:

- Store at -20°C for long term (Stable for +12months). Possible at +4°C ^(M).
- Keep desiccated. Protect from light.

Handling and Use:

For best use, material should always be kept in low temperature in dry conditions and under inert gaz for best stability. Prepare fresh solution right before use. Avoid frequent thaw and freezing.

Related / associated products and documents

See or [ask](#) for Heterobifunctional PEG and PEO reagents; 3/4/5/6Arm-PEG reagents

See [BioSciences Innovations catalogue](#) and [e-search tool](#).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

Disclaimer : Materials from Uptima are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. Uptima is not liable for any damage resulting from handling or contact with this product. Rev.T03E