

PEGylation silane reagents

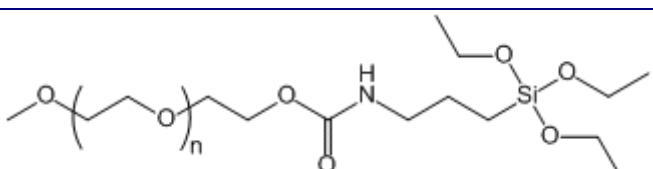
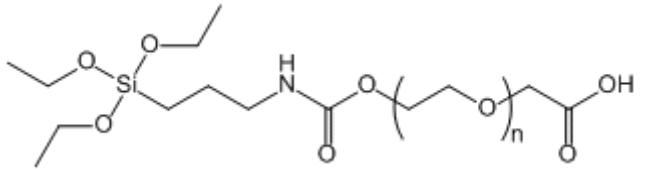
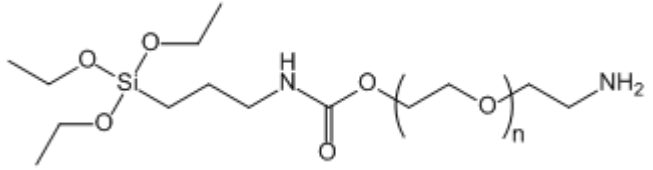
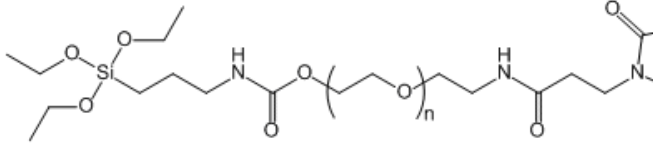
(for Glass or silicone surface modification)

Products Description

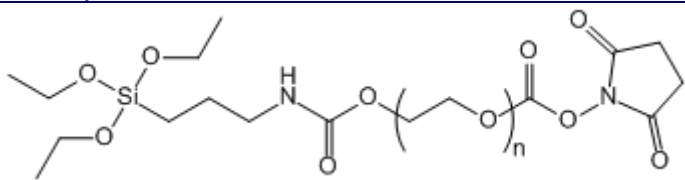
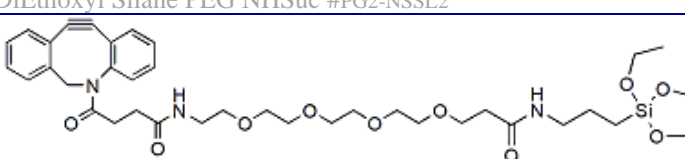
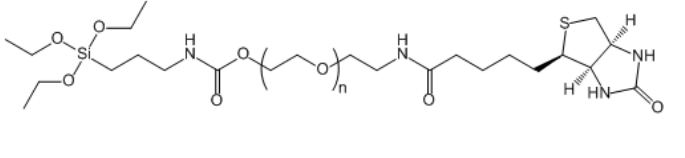
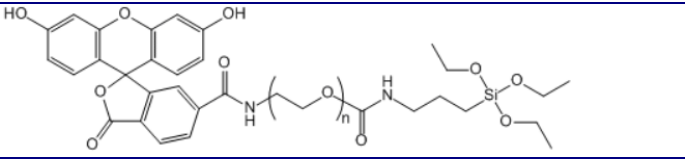
Silane functionalized PEGs (PolyEthyleneGlycol chains), PEG-Si, can be used to modify glass, silica, silicone and other surfaces via the reaction between hydroxyl group and triethoxyl silane. They can thus functionalize these support with groups that will confer other physico-chemical properties, such as an amine, COOH, or SH, Maleimide, succinimidyl (NHS), and Biotin. Hence

-pegylation can greatly suppress the non-specific binding of charged molecules to the modified surfaces.

-one can prepare 'activated' supports that can be further treated (conjugation, coating, SAM reagents), and used typically in detection systems such as biocaptors, microscopy slides, microarrays,... They have wide applications for medical devices, biomedical/ biological microelectromechanical systems⁰ and biocompatible material development. Other applications include special optical lenses, purification,...

Product name cat. number	Cat. number Qty : ^{0-100mg} 2-1g 3-5g	MW (g·mol ⁻¹)	
Silane-mPEG			
mPEG-Silane (L,M) PG1-SL BN	GV7362 GV7372 GV7382 OO7022 EV4982 WT9712 DY8032 GV7352 AWKI52 B2ZUM2 B2ZUN2	350 550 750 1 000 2 000 3 400 5 000 10 000 20 000 30 000 40 000	 <p>Also available :</p> <p>MonoEthoxy Silane mPEG #PG1-SL1 DiEthoxyl Silane mPEG #PG1-SL2 TriEthoxyl Silane mPEG #B6BL61 (2K) PG1-SL-</p>
Silane-PEG derivatives			
Silane-PEG_x-COOH (M) (L,M) PG2-CASL	Inquire AWKI72 GV7332 WT9742 GV7322 LO5312	600Da 1 000 2 000 3 400 5 000 10 000	 <p>Also available :</p> <p>MonoEthoxyl Silane PEG Acid #AWK7Q1 (5K) PG2-CASL1 DiEthoxy Silane PEG Acid #AWJTY- (5K) PG2-CASL2</p>
Silane-PEG_x-Amine (M) (L,M) PG2-AMSL BN	Inquire WT9702 DZ5162 DZ5382 DZ5392 Inquire	1 000 2 000 3 400 5 000 10 000 20 000	 <p>Also available :</p> <p>MonoEthoxy Silane PEG Amine #AWK7N1 (5K) PG2-AMSL1 DiEthoxyl Silane PEG Amine #AWJTW1 (5K) PG2-AMSL2</p>
Silane-PEG_x-Maleimide (M) (M) PG2-MLSL	Inquire GV7312 WT9722 FO9492 LO4662	1 000 2 000 3 400 5 000 10 000	 <p>Also available:</p>

FT-LO5312

Product name cat.number	Cat.number Qty : 0-100mg 2-1g 3-5g	MW (g·mol ⁻¹)	
			MonoEthoxy Silane PEG Maleimide # () PG2-MLSL1 DiEthoxyl Silane PEG Maleimide # (5K) PG2-MLSL2 >
Silane-PEG_x-NHSuccinimide (M) (M) PG2-NSSL	Inquire Inquire B36M82 GV7262 WT9732 GV7252 LO8212 AWKIA2	200 – 400 600 – 800 1 000 2 000 3 400 5 000 10 000 20 000	 <p>Also available: MonoEthoxy Silane PEG NHSuc #AWK7S1 (5K) PG2-NSL1 DiEthoxyl Silane PEG NHSuc #PG2-NSSL2</p>
Silane-PEG_x-DBCO (M) (M) PG2-SLTH See DBCO-PEG ₄ -TriEthoxy-SILANE #BFXLG1	Inquire	1 000 to 20 000	
Silane-PEG_x-Azide (N3) (M) (M)	Inquire	1 000 to 20 000	See AZIDE-PEG ₄ -TriEthoxy-SILANE #BFXN31 AZIDE-PEG ₅ -TriEthoxy-SILANE #BFXN21
Silane-PEG_x-SH (M) (M) PG2-SLTH	WT9750	3 400	
Ask for other functional groups			Hydroxyl -PEG _x -Silane mPEO ₆ -Silane Acrylate-PEG _x -Silane Alkyne-PEG _x -Silane OPSS-PEG _x -Silane
Silane-PEG_x-Biotin (K,M) PG2-BNSL	ANEZD2 IV2272 GV7282 WT9712 GV7272 LO5322	200 1 000 2 000 3 400 5 000 10 000	
Silane-PEG_x-FITC	B8CJE2 B8CJD2 AWKI82	1000 2000 5000	
Ask for other other labels and ligands:			3-ArmPEG _x -(1Silane-2Biotin) Silane-PEG ₄ -Biotin Silane-PEG ₆ -Biotin Monoethoxylsilane-PEG-Biotin DMPE-PEG _x -Silane DSPE-PEG _x -Silane CLS-PEG-Silane(Cholesterol)

- Physical Properties:

Appearance: Off white solid or viscous liquid depending on molecular weight.

Solubility: Soluble in regular aqueous solution (H₂O) as well as most organic solvents (DMSO).

- Storage Conditions:

Store: -20°C, desiccated. Silane PEG tends to hydrolyze from moisture. Avoid frequent thaw and frozen. (M)

FT-LO5312

● **Reaction Procedures:**

Generally, silane PEG is first dissolved in a mixture of ethanol/water solution, then allow the solution to contact with oxidized glass or silica surface for 30 min to 2 hours. Under this condition, silane PEG should bind to the material covalently.

See the technical notice for each functional group ^[XLerd].

● **Materials Required:**

Pegylation solution: Ethanol/water (w/w, 95%/5%);

Silane PEG stock solution, 10~50 mg/mL in pegylation solution, prepare in fresh.

Washing solution: Distilled water.

● **Reaction Steps:**

1. Dissolve targeted materials in Pegylation buffer.
2. Add silane PEG stock solution to the targeted conjugation materials with the final concentration keep at least 10 mg/mL. 10~50 molar excess of silane PEG needed for optimal conjugation;
3. Allow mixture agitates at room temperature for 30 min at room temperature or 2 hours at 4 -20 0C.
4. Wash out unreacted materials either by distilled water.

● **Related reagents**

AZIDE-PEG₄-TriEthoxy-SILANE #BFXN31

AZIDE-PEG₅-TriEthoxy-SILANE #BFXN21

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

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

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