

HomoBifunctional PEGylation reagents (Bi- and Branched Multi-) (X-PEG-X)

Products Description

PolyEthylene Glycol (**PEG**, also known as **PEG**: PolyEthylOxy) is a convenient structure used to functionalize biomolecules and supports. It is available in a variety of lengths, providing a flexible spacer, and it is highly hydrophilic. These features are taken to good account to create conjugates of affine probes, fluorescent or enzymatic markers, peptides, supports like polystyrene plates, resins, agaroses... PEG have found great application to create biomaterial, as drug delivery systems, hydrophilic gels, special coated surfaces, biocaptors, vaccines...

PEG reagents are available with a variety of reactive groups, functional groups or labels:
 - with one group, with 2 groups (identical= homobifunctional; or different= heterobifunctional) and more groups (multifunctional) that can be used for conjugations.
 - with labels or ligands: biotin, Fluorescein, and DSPE, for detection, probing or binding applications.

The following sheet lists the **HomoBiFunctional PEG reagents**: they bear:
 -a PEG chain which length ranges from 400Da to 40kDa
 -2 identical functional groups positioned at the PEG chain ends

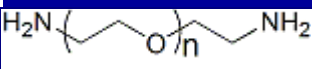
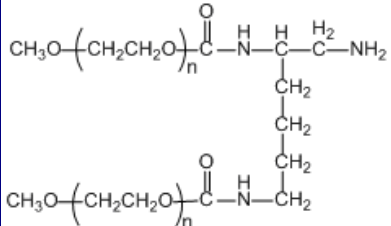
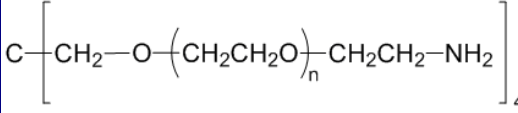
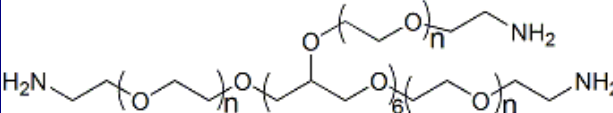
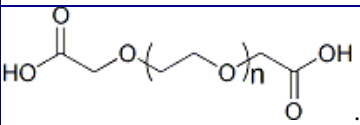
Storage: The reagents are recommended to be stored typically at -20°C (M, J, I)
 (some may be stored at room temperature (Z)
 or $+4^{\circ}\text{C}$ (L, K), but -20°C is recommended for long-term storage)

| Functional group | Reactivity • | |
|--|--------------------------------------|-----|
| NH ₂ (amine) | Poor/ COOH via EDC | Z |
| COOH (carboxyl) | Poor/Amines via EDC | Z |
| CHO (aldehyde) | Amines, HyNic | K |
| SH (thiol) | Thiols | K |
| OH (hydroxyl) | poor | Z |
| | | |
| NHS (Succinimidyl,esters: SE, SMC, SVA, GS, SPA, SS) | Amines (*) | K/M |
| Maleimidyl (MAL) | SH (*) | M |
| | | |
| Carbonyl Imidazol (CDI) | Amines | |
| Tosyl | Amines | |
| Epoxy (EPO) | | |
| VinylSulfone (VS) | SH | |
| NitroPhenylCarbonyl (NP) | OH & Amines | |
| Maleimidyl (MAL) | SH (*) | M |
| OPSS (o-pyridyl disulfide) | SH | M |
| IodoAcetate (IA) | SH | |
| Hydrazide (HYD) | COOH via EDC | M |
| Azide (AZ) | Most H | |
| Hydrazide (HYD) | | |
| Isocyanate (ISC) | Amines (unspecific: + most H) | |
| Alkyne | Azide (Click chemistry) | |
| Acrylate | | |
| Silane | hydroxyl group and triethoxyl silane | |
| Pentafluorophenyl (PFP) | | |
| | | |
| Biotin | Avidin | K |

(*) privileged method in mild and aqueous solution

• Please see the technical notices for information about reactivity of each functional group

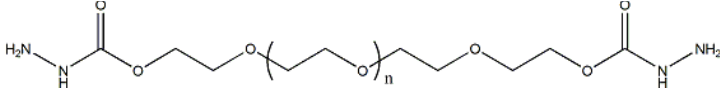
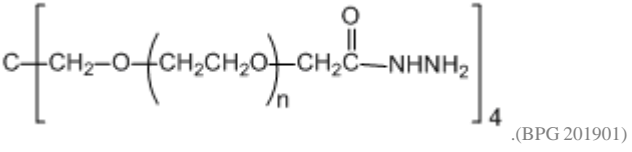
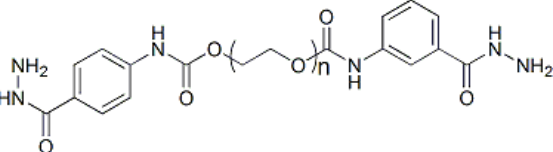
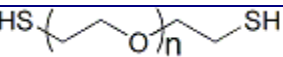
FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|---|---|--|---|
| Amino-PEG_x-Amine Bis-PEG-Amine (L) PG2-AM [B] [N] Soluble in regular aqueous solution as well as most organic solvents; Sizes: 1-1g, 2-5g | AWJKX- B36FE1 inquire WU0121 WU0111 WU0101 WU0131 WU0141 B36FD1 B36FF1 | 200to800Da 400Da 600Da 1 000 2 000 3 400 5 000 10 000 20 000 30 000 40 000 |  Ask sets of 3/6 MW #AWK9Q0/1 B36FB-1500Da, B36FG-4000Da, KV269-6000Da See also Amino-PEO _x -Amine (VEZ82) Boc-NH-Amine (B36FM1) |
| 2Arm-PEG-Amine Bis-PEG-Amine (L) PG2A-AM [B] [N] | AWJHJ1 Inquire Inquire AWJHI1 Inquire Inquire Inquire 1-1g, 2-5g | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 |  |
| 4Arm-PEG-Amine Tetra-PEG-Amine (L) PG4A-AM [B] [N] | Inquire AWJIB1 AWJIC1 AWJID1 Inquire Inquire Inquire 1-1g, 2-5g | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 |  |
| 8Arm-PEG-Amine Octo-PEG-Amine (Z) PG8A-AM [B] [N] | AYR1R1 AWJIY1 AYR1P1 AYR1S1 AYR1Q1 1-1g, 2-5g | 5 000 10 000 20 000 30 000 40 000 |  |
| Ask for other PEG-Amine derivatives | | | mPEG-Amine #WT9801 [FT-AYPMB0] t-Boc-AminoOxy-PEG _x -Amine (8X822) Tri-(Amino-PEG _x -Amide)-Amine (AYN7I) |
| COOH-PEG_x-COOH Bis-PEG-Carboxyl (Z) PG2-CA [B] CAS: 39927-08-7 Soluble in regular aqueous solution as well as most organic solvents; | WU0221 WU0211 WU0201 WU0231 WU0241 | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 |  [B] (Z) RPW52 LV7983 LV7973 See HOOC-PEG _x -COOH (paucidisperse) (FT- WU0221) & Monodisperse PEG : HOOC-PEO _n -COOH (FT- AWKOH1) |
| Ask for other PEG-Carboxyl | | | mPEG-Carboxyl#WT9860 [FT-AYPMB0] |

FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|---|---|--|---|
| Aldehyde-PEG_x-Aldehyde Bis-PEG-Aldehyde (CHO) (L) [B] PG2-AL Soluble in regular aqueous solution as well as most organic solvents. | Inquire AWJKE1 FH9191 WU0261 WU0251 WU0271 WU0281 | 200 to 800Da 1 000 2 000 3 400 5 000 10 000 20 000 30 000 40 000 | B36F5-1500Da |
| CHO-PEG_n'-CHO [C] (Z). | KV8710 KV8720 KV8730 KV8740 KV8750 KV8760 | 1 000 2 000 3 400 5 000 10 000 20 000 | RPW760 |
| CHO-X-PEG_n-X-CHO [I](Z) | KV8660 KV8670 KV8680 KV8690 KV8700 | 750 2 000 5 000 10 000 20 000 | |
| 4Arm-PEG-Aldehyde Tetra-PEG-Aldehyde (CHO) (L) PG4-AZ [B] [N] | Inquire AWK9C- | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 | |
| 8Arm-PEG_x-Aldehyde Octo-PEG-Aldehyde (CHO) (L) PG8-AZ [B] [N] Soluble in regular aqueous solution as well as most organic solvents | Inquire | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 | |
| Ask for other PEG-Aldehyde | | | mPEG-Aldehyde #AYR1B1 [FT-AYPMB0] |
| 4Arm-PEG-Azide Tetra-PEG-Azide (L) PG4-AZ [B] [N] Soluble in regular aqueous solution as well as most organic solvents | Inquire | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 | |
| 8Arm-PEG-Azide Octo-PEG-Azide (L) PG8-AZ [B] [N] Soluble in regular aqueous solution as well as most organic solvents | Inquire | 2 000 3 400 5 000 10 000 20 000 30 000 40 000 | |
| 7&1Arm-PEG-COOH&Azide Octo-PEG-Carboxyl&Azide (L) [B] [N] | Inquire | 2 000 10 000 40 000 | |
| Ask for other PEG-Azide derivatives | | | mPEG-Azide #WT9970 [FT-AYPMB0] |

FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|---|------------------------|------------------------------|---|
| Hydrazide-PEG_x-Hydrazide Bis-PEG-Hydrazide ^(M) [B] [N] Soluble in regular aqueous solution as well as most organic solvents. | AYR5Z1 | 1 000 |  |
| | AYR6A1 | 2 000 | |
| | AYR6B1 | 3 400 | |
| | AYR6C1 | 5 000 | |
| | AYR6D1 | 10 000 | |
| | AYR6E1 | 20 000 | |
| | AYR6F1 | 30 000 | |
| AYR6G1 | 40 000 | | |
| Hydrazide-PEG_x-Hydrazide PEG-di-Hydrazide ^(L) PG2-HAZ | FV1080 | 1 000 | $\text{NH}_2\text{NH}-(\text{OCH}_2\text{CH}_2)-\text{CH}_2\text{CH}_2-\text{NHNH}_2$ AWK1Q0 |
| | LV4540 | 2 000 | |
| | WU0420 | 3 400 | |
| | WU0410 | 5 000 | |
| | WU0430 | 10 000 | |
| | WU0440 | 20 000 | |
| 4Arm-PEG-Hydrazide Tetra-PEG-Hydrazide ^(L) PG4-HAZ [B] [N] | Inquire | 2 000 |  |
| | | 3 400 | |
| | | 5 000 | |
| | | 10 000 | |
| | | 20 000 | |
| BenzoHydrazide-PEG_x-Hydrazide BenHz-PEG-BenHz ^(L) [B] | Inquire | 2 000 |  |
| | | 3 400 | |
| | | 5 000 | |
| | | 10 000 | |
| | | 20 000 | |
| Ask for other PEG-HydraZide | | | mPEG-HydraZide #AYPMB0 [FT-AYPMB0] |
| Hydroxyl-PEG_x-Hydroxyl Bis-PEG-Hydroxyl (OH-PEG-OH) PEG [B] [N] Size : 1 ^{-10g} | AWKBP1 | 200 | mPEG-Hydroxyl #IO5041 [FT-AYPMB0] Polyethylene Glycol #569832 |
| | AXCJT1 | 400 | |
| | AXCJU1 | 600 | |
| | AXCJV1 | 800 | |
| | B36B01 | 1 000 | |
| | B36B11 | 1 500 | |
| | B36B21 | 2 000 | |
| | B36B31 | 3 400 | |
| | B36B41 | 8 000 | |
| | B36B51 | | |
| | B36B61 | 30 000 | |
| | B36B71 | 40 000 | |
| | B36B81 | | |
| | B36B91 | | |
| Thiol-PEG_x-Thiol (SH-PEG-SH) Bis-PEG-Thiol PG2-TH [B] [N] Size : 1 ^{-1g} | AWKL81 | 200 |  WU0550 - 1B7370 |
| | B36MQ1 | 400 | |
| | B36MR1 | 600 | |
| | B36MS1 | 800 | |
| | B36MT1 | 1 000 | |
| | B36MU1 | 1 500 | |
| | B36MV1 | 2 000 | |
| | B3AGX1 | 3 400 | |
| | B3AGY1 | 6 000 | |
| | B3AGZ1 | 8 000 | |
| | B3AH01 | | |
| | B3AH11 | 30 000 | |
| | B3AH21 | 40 000 | |
| | B3AH31 | | |
| B3AH41 | | | |
| Ask for other PEG-Thiol derivatives | | | mPEG-Hydroxyl #IO5041 [FT-AYPMB0] mPEG-Thiol #WT9970 [FT-AYPMB0] |

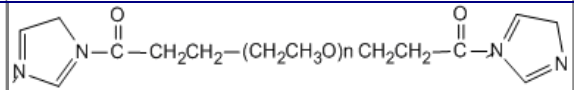
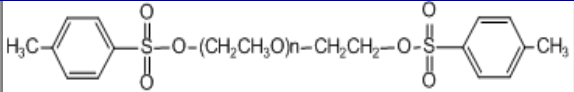
FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|--|--|--|--|
| Maleimide-PEG_x'-Maleimide Bis-PEG-Maleimide (M) PG2-ML RPW660 | WU0300 | | |
| Maleimide-PEG_x-Maleimide Bis-PEG-Maleimide (M) [B] Size : 1 ^{-1g} | AWK6C1 AWK6C2 B36L91 B36LA1 WU0301 WU0291 WU0311 WU0321 | 400 600 1 000 2 000 3 400 5 000 10 000 20 000 | |
| 2Arm-PEG_x-Maleimide Branched-PEG-Maleimide (M) [B] Size : 1 ^{-1g} | - B3AH51 B3AH61 1 ^{-1u} | 1 000 4 000 10 000 40 000 | |
| 4Arm-PEG_x-Maleimide 4-Branched-PEG-Maleimide (M) [B] Size : 1 ^{-1g} | 7A3440 B3AH71 B3AH81 B3AH91 7A3450 | 400 2 000 5 000 10 000 20 000 | |
| 8Arm-PEG_x-Maleimide 8-Branched-PEG-Maleimide (M) [B] Size : 1 ^{-1g} | - B3AHA1 B2AHB1 B3AHC1 B3AHD1 B3AHE1 | 400 2 000 5 000 10 000 20 000 40 000 | |
| | | | Ask for any custom PEG, i.e. 8-ArmPEG-(2Arm-Mal,6Arm-Biotin) |
| NHSuc-PEG_x-NHSuc Bis-PEG-Succinimidyl (M) PG2-NS RPW770 Size : 1 ^{-100mg} 0 ^{-1g} 2 ^{-5g} | RPW77E RPW77F B36LV0 GO5390 WU0340 WU0330 B36LX0 B36LY0 WU0350 WU0360 B36LW1 | 400 600 1 000 2 000 3 400 5 000 6 000 8 000 10 000 20 000 35 000 | |

FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|---|---|---|--|
| <p>NHS, SC SCM SPA SG SVA SS</p> | | | <p>See FT-B4ZBV1 Bis-PEG_x-Succinimides :</p> <p>NHS-PEG-NHS, SC-PEG-SC : Succinimidyl ester-PEG-Succinimidyl ester SCM-PEG-SCM : Succinimidyl Carboxymethyl Ester-PEG-Succinimidyl Carboxymethyl Ester SPA-PEG-SPA : Succinimidyl Propionate-PEG-Succinimidyl Propionate . SG-PEG-SG : Succinimidyl Glutarate ester-PEG-Succinimidyl Glutarate ester SVA-PEG-SVA : Succinimidyl valerate-PEG-Succinimidyl valerate SS-PEG-SS : Succinimidyl Succinate ester-PEG-Succinimidyl Succinate ester</p> |
| <p>SAS GAS</p> | | | <p>SAS-PEG-SAS : Succinamide Succinimidyl ester-PEG-Succinamide Succinimidyl ester GAS-PEG-GAS : Glutaramide Succinimidyl ester-PEG-Glutaramide Succinimidyl ester</p> |
| <p>SSCM</p> | | | <p>SCM-S-PEG-S-SCM (cleavable)</p> |
| <p>TFP-PEG_x-TFP Bis-PEG-TetraFluoroPhenyl (M) PG2-OS</p> | | | <p>See FF-B4ZBS1 Bis-PEO_n-TFP-Esters</p> |
| <p>•</p> <p>OPSS-PEG_x-OPSS Bis-PEG-OrthopyridylDiSulfide (M) PG2-OS RPY910</p> | <p>Inquire Inquire Inquire Inquire WU0380 WU0370 WU0390 WU0400</p> | <p>400 600 1 000 2 000 3 400 5 000 10 000 20 000</p> | |
| <p>Iodoacetate-PEG_x-Iodoacetate PEG-di-iodoacetate (IA) (M) PG2-IA</p> | <p>Inquire</p> | <p>400 to 40 000</p> | |
| <p>DiVinylSulfone-PEG_x-DiVinylSulfone Bis-PEG-DiVinylSulfone (VS) (M) PG2-VS</p> | <p>Inquire</p> | <p>400 to 40 000</p> | |
| <p>NPC-PEG_x-NPC Bis-NitroPhenylCarbonyl-PEG (M) [B][N]</p> <p>Soluble in regular aqueous solution as well as most organic solvents.</p> | <p>AWKA61 LV4551 WU0461 WU0451 WU0471 WU0481 Inquire Inquire</p> | <p>1 000 2 000 3 400 5 000 10 000 20 000 30 000 40 000</p> | |
| <p>Epoxide-PEG_x-Epoxide Bis-PEG-Epoxide (M) PG2-EP</p> | <p>WU0500 WU0490 WU0510 WU0520</p> | <p>3 400 5 000 10 000 20 000</p> | |

FT- WU0101

| Product name cat.number | Cat.number Qty : 1g | MW (g·mol ⁻¹) | |
|--|---|---|--|
| Acrylate-PEG_x-Acrylate Bis-PEG-Acrylate (M) PG2-ACR | Inquire | 400 to 40 000 | |
| 4Arm-PEG_x-Acrylate Tetra-PEG-Acrylate (L) PG4-AR [B] [N] | Inquire AWJIA1 | 2 000 3 400 5 000 10 000 20 000 | |
| Isocyanate-PEG_x-Isocyanate Bis-PEG-ISC (M) PG2-IS | AWK2Y1 WU0531 B36L51 B3AHF1 Inquire | 2 000 3 400 5 000 10 000 400 to 40 000 | $O=C=N-(CH_2CH_2O)_n-CH_2CH_2-N=C=O$ |
| CDI-PEG_x-CDI Bis-PEG-Carbonyl Imidazol (M) PG2-CDI | WU0540 Inquire | 3 400 400 to 40 000 |  |
| Tosyl-PEG_x-Tosyl BisTosyl-PEG (M) | Inquire Inquire | 3 400 400 to 40 000 |  |
| pentafluorophenyl-PEG_x-pentafluorophenyl (PFP-PEG-PFP) Bis-PEG-PentaFluoroPhenyl PG2-PFP | B36MI0 B36MK0 AWKB90 B3AHG0 B36MH0 B36MJ0 Inquire | 1 000 2 000 3 400 5 000 10 000 20 000 400 to 40 000 | |

Store all PEG at +4°C (L)(Possible at RT for Amine, Coraboxyl).

Related products

Other PEG/PEG reagents, including purified PEGs, synthetic PEG products (POG3 to POG36):

- Heterobifunctional crosslinkers: [NHS-PEG-MAL \(AL6581\)](#) (altern.to SMCC 17412A)
- Homobifunctional crosslinkers: [NHS-PEG-NHS \(BH8811\)](#) (altern.to DSS 54940A)
[MAL-PEG-MAL \(L7736A\)](#) (altern.to BMOEL7730A)
- PEG Linkers & modifiers: [Maleimide-PEG-COOH \(AZ4170\)](#) (altern.to BMPA 43064A)
[NHS-PEG-COOH \(AN1280\)](#)
[Maleimide-PEG-Amine \(FK3520\)](#)
[Azide-PEG-COOH \(WU0930\)](#)
- PEG modifiers: [mPEG reagents \(DZ3531\)](#): mPEG-NHS and others mono-fonctionnal (MAL) (-SH, -OH,...)

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

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.

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