FT- 0A5061

Lipoic Acid – PEG$_x$ reagents
(modifiers)

Description:

• **α-lipoic acid** (Lipoic acid**,** or thioctic acid, LA, ALA) is an organosulfur compound derived from caprylic acid (octanoic acid). It is needed by the body to produce the energy for our body's normal functions.
Alpha lipoic acid converts glucose (blood sugar) into energy.
Alpha lipoic acid is also an antioxidant, a substance that neutralizes free radicals, in water and fat (unlike the more common antioxidants, vitamins C and vitamin E). It appears to be able to recycle antioxidants such as vitamin C and glutathione (an an important antioxidant) after they have been used up.
Lipoic acid can be used to bind to metallic particle or film surface with its -S-S-bond, thank its high affinity . It has been widely used for gold nanoparticles and quantum dots surfaces.

• PEG-Lipoic acid derivatives contain the PolyEthyleGlycol arm (PEG) in different lengths (from 400da to 40KDa) that imparts hydrophilicity and other physicochemical properties. For example, the PEG tether can suppress the non-specific binding of charged molecules to the modified surfaces.

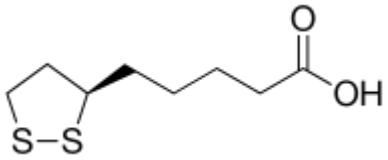
PEGylated lipoic acid is water soluble and can be used directly in aqueous buffer.

• PEG-Lipoic acid derivatives contain a **functional group** that can be used by conventional chemistry to create conjugates.
These reagents can modify peptides and proteins and other materials, to create conjugates and/or to increase solubility and stability and reduce immunogenicity.

Please see the technical notices for each functional gourp.
NHS, Maleimide, Carboxyl, Amine, Azide, Hydroxyl, Thiol
called Click Chemistry. PEGylated lipoic acid azide is water soluble and can be used directly in aqueous buffer.

Lipoid acid – mPEG reagents

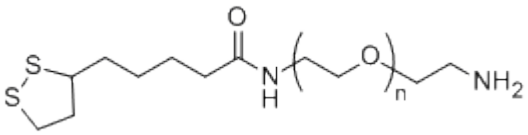
* Structure :



Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
MF001039-PG2-ASLA	mPEGx - LIPOIC ACID (mPEG-LA)
B2XZV2, 1g	“ MW: 550Da
B2XZW2, 1g	“ MW: 750Da
B2XZX2, 1g B2XZX2, 5g	“ MW: 1000Da
B2XZY2, 1g B2XZY2, 5g	“ MW: 2000Da
B2XZZ2	“ MW: 3400Da
AWK4A2, 1g AWK4A3, 5g	“ MW: 5000Da
B2Y002, 1g B2Y003, 5g	“ MW: 10000Da
B2Y012, 1g B2Y013, 5g	“ MW: 20000Da
B2Y022, 1g B2Y023, 5g	“ MW: 30000Da
B2Y032, 1g B2Y033, 5g	“ MW: 40000Da

FT- 0A5061

Lipoid acid – PEG – Amine reagents

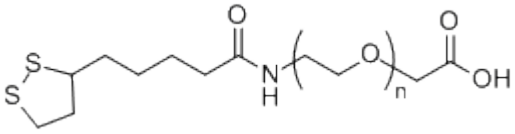


* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
MF039005 PG2-AMLA	LIPOIC ACID – PEGx – AMINE (LA-PEG-NH_2)
B2XZQ2-	“ MW: 400Da
B2XZR2	“ MW: 1000Da
B2XZS2, 1g B2XZS3, 5g	“ MW: 2000Da
B2XZT2, 1g B2XZT3, 5g	“ MW: 3400Da
B2XZU0	“ MW: 4000Da
0A5061, 1g 0A5062, 5g	“ MW: 5000Da
AWK3T2, 1g AWK3T3, 5g	“ MW: 10000Da
IO7610, 100mg IO7612, 1g	“ MW: 20000Da
(other sizes online or on inquire)	LIPOIC ACID PEG AMINOOXY
AWK3U0, 100mg	“ MW: 5000Da

* Properties:
| Soluble in regular aqueous solution as well as in most organic solvents
*
Store at -5°C(K) , Keep in dry and avoid sunlight.

Lipoid acid – PEG – Carboxylic Acid reagents



* Structure :

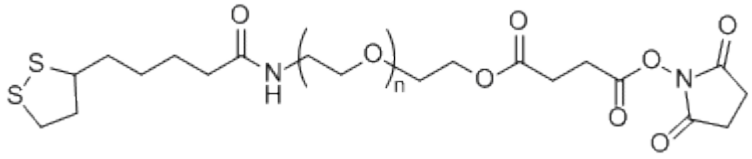
Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE039017- PG2-CALA	LIPOIC ACID – PEGx – CARBOXYL (LA-PEG-COOH)
Inquire	“ MW: from 400Da to 3000da
AWK3S2, 1g	“ MW: 2000Da
B2Y052, 1g	“ MW: 3400Da
B2Y062, 1g	“ MW: 5000Da
B2Y072, 1g	“ MW: 10KDa
inquire	“ MW: from 10KDa to 40KDa

* Properties:
| Soluble in regular aqueous solution as well as in most organic solvents
*
Store at -5°C(K) , Keep in dry and avoid sunlight.

Lipoid acid – PEG – NHS (Succinimide) reagents

* Structure : LA-PEG-SS, Lipoamido-PEG-Succinimidyl **Succinate** ester

FT- 0A5061



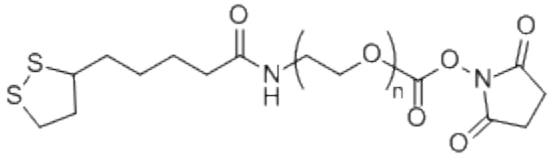
HE039028-2K-3.4-5-10

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE039028-PG2-LANS	LIPOIC ACID – PEGx – NHSuc (LA-PEG-NHS)
Inquire	“ MW: from 400Da to 1000Da
AWKY2, 1g	“ MW: 2000Da
JV4452, 1g	“ MW: 3400Da
B2Y082, 1g	“ MW: 5000Da
B2Y092, 1g	“ MW: 10000Da
inquire	“ MW: from 20KDa to 40KDa

* Properties:
| Off-yellow solid or viscousliquid depends on molecule weight;
| Soluble in regular aqeous solution as well as most organic solvents;
* Store at -20°C$^{(M)}$ (+4°C for short term)

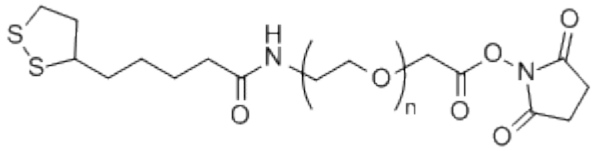
Please inquire also for

LA-PEG-SC, LA-PEG-NHS, Lipoic acid-PEG-**NHS** #B2Y0A0



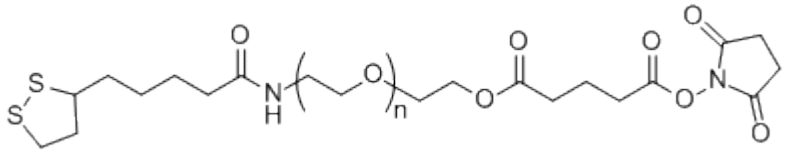
HE039024

LA-PEG-CMNHSuc LA-PEG-SCM, Lipoamido-PEG-Succinimidyl **Carboxymethyl** Ester #B2Y0A0



HE039024

LA-PEG-GNHSuc, LA-PEG-SG, Lipoamido-PEG-Succinimidyl **Glutarate** ester #B2Y0B0



HE039027

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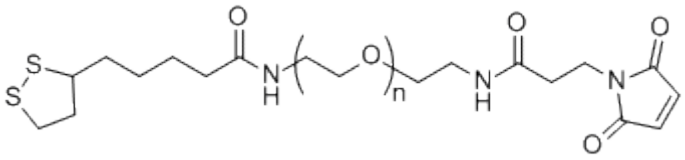
Lipoid acid – PEG – Maleimide reagents



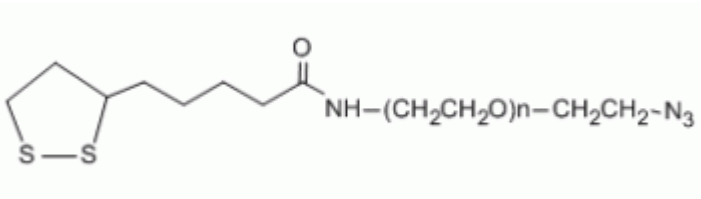
* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE039022 PG2-LAML	LIPOIC ACID – PEGx – MALEIMIDE (LA-PEG-NHS)
Inquire	“ MW: from 400Da to 3000Da
JV3732, 1g	“ MW: 3400Da
inquire	“ MW: from 4KDa to 40KDa

* Properties:
| Off-yellow solid or viscous liquid depends on molecule weight;
| Soluble in regular aqeous solution as well as most organic solvents;

* Store at -20°C(M), dessiccated Protect from light. Avoid frequent thaw and freeze.

Lipoid acid – PEG – Azide reagents



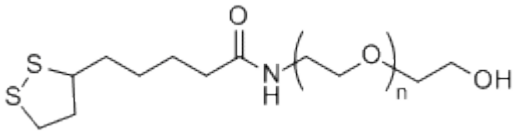
* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
PG2-AZLA	LIPOIC ACID – PEGx – AZIDE (LA-PEG-N_3)
Inquire	“ MW: from 400Da to 4000Da
AWK3V0, 100mg	“ MW: 5000Da
inquire	“ MW: from 6KDa to 40KDa

* Properties:
| Off-yellow solid
| Soluble in regular aqeous solution as well as most organic solvents
| Reactive group: Azide (-N3)
| Reactive toward: Alkyne

* Store at -20°C(M).

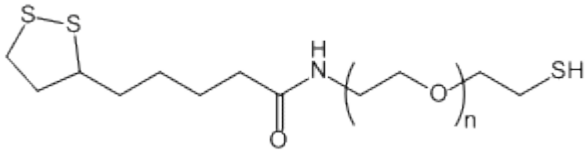
Lipoid acid – PEG – Hydroxyl reagents

* Structure : 

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE039002-PG2-LAOH	LIPOIC ACID – PEGx – HYDROXYL (LA-PEG-OH)
Inquire	“ MW: from 400Da to 4000Da
B2Y0D2, 1g	“ MW: 4000Da
AWK3Z2, 1g	“ MW: 5000Da
inquire	“ MW: from 6KDa to 40KDa

* Store at -20°C(M).

Lipoid acid – PEG – Thiol reagents

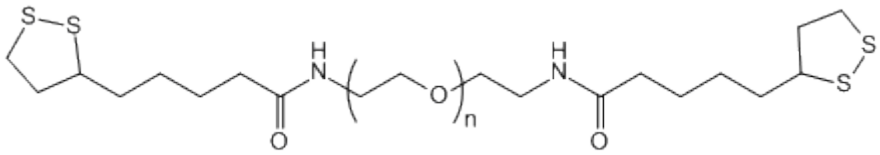


* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE003039-	LIPOIC ACID – PEGx – THIOL (LA-PEG-SH)
Inquire	“ MW: from 400Da to 4000Da
B2Y0G2, 1g	“ MW: 4000Da
B2Y0H2, 1g	“ MW: 5000Da
inquire	“ MW: from 6KDa to 40KDa

* Store at -20°C(M).

Lipoid acid – PEG – Lipoid acid reagents (Homobifunctional)

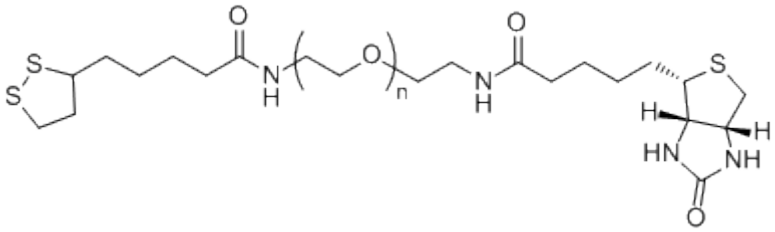


* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HO039039	LIPOIC ACID – PEGx – LIPOIC ACID (LA-PEG-OH)
Inquire	“ MW from 400Da to 4000Da
B2Y042, 1g	“ MW: 5000Da
inquire	“ MW: from 7KDa to 40KDa

Ask also for **Folic Acid-PEG-Lipoic acid** (Folate-PEG-LA, FA-PEG-LA) #B2Y0C0 HE057039

Lipoid acid – PEG – Biotin reagents



* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
HE039041-PG2-BNLA.	LIPOIC ACID – PEGx – BIOTIN (LA-PEG-N_3)
Inquire	“ MW: from 400Da to 1000Da
AWK3W0, 100mg	“ MW: 2000Da
AWK3W1>B2Y0E2, 1g B2Y0E3, 5g	“ MW: 3400Da
AWK3W2>B2Y0F2, 1g B2Y0F3, 5g	“ MW: 5000Da
inquire	“ MW: from 10KDa to 40KDa

* Properties:
| Off-yellow solid or viscous liquid depends on molecular weight
| Soluble in regular aqueous solution as well as most organic solvents
| Biotin group bind to (strep)avidin with very high affinity

* Store at +4°C(K).

Lipoid acid – PEG – FITC reagents

* Structure :

Cat.Number (other sizes online or on inquire)	Name & MW (Da ~ g·mol^{-1})
PG2-FCLA	LIPOIC ACID – PEGx – Fluoresein (LA-PEG-FITC)
Inquire	“ MW: from 400Da to 4000Da
AWK3X0, 100mg	“ MW: 5000Da
inquire	“ MW: from 6KDa to 40KDa

* Properties:
| Off-yellow solid or viscous liquid depends on molecular weight
| Soluble in regular aqueous solution as well as most organic solvents
| Biotin group bind to (strep)avidin with very high affinity

* Store at -20°C(M).

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.

Please ask Uptima@interchim.com for catalog sizes and prices or Interchim; Hotline : +33(0)4 70 03 73 06

Related products:
Other PEGylated lipidic agents