ProteoChem

Crosslinking Protein Biology & Chemistry

Premium Reagents

Proteomics Reagents

Crosslinkers

Biotinylation

Chromatography

Mass Spectrometry

Purified Enzymes

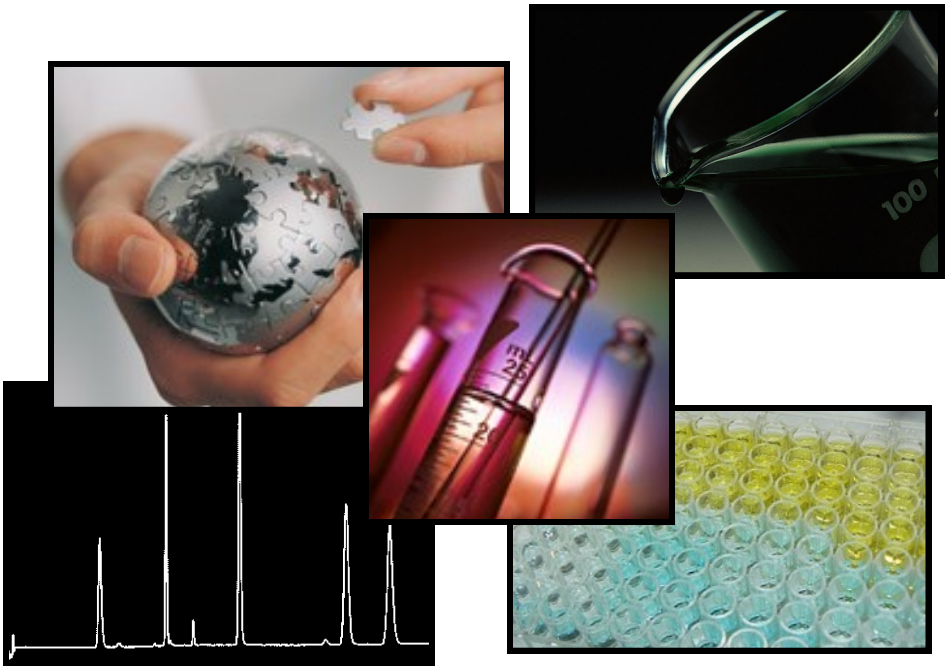
Immobilization

Purified Detergents

Analytical Standards

2016
Product
Catalog

Introduction



ProteoChem is a chemical and biotechnological reagent manufacturing company that specializes in protein biochemistry and organic synthesis. ProteoChem manufactures protein crosslinkers, analytical standards, and novel proteomics reagents for protein detection and protein modification that are used in mass spectrometry, drug development, diagnostics, and protein biology.

ProteoChem is a responsive company employing scientists with decades of scientific experience. Our flexibility, versatility, and knowledge allow us to undertake endeavors which may otherwise require significant research and development. We provide custom synthesis and bulk manufacturing services to our customers in the biotech, diagnostic, and pharmaceutical industries.

ProteoChem

Crosslinking Protein Biology & Chemistry

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Protein Crosslinkers

Protein crosslinkers are chemical compounds used to covalently bind, or conjugate, biomolecules together. In proteomics, "protein crosslinking" refers to utilizing protein crosslinkers to conjugate peptides or proteins together or to immobilize proteins to a solid support.

Protein crosslinking reagents possess reactive moieties specific to various functional groups (sulfhydryls, amines, carbohydrates, etc.) on proteins, peptides, or other molecular complexes. The atoms separating a crosslinker's reactive groups, and eventually the conjugated proteins, form the "spacer arm". A zero-length crosslinker refers to protein crosslinkers that join two molecules without adding additional spacer arm atoms. Homobifunctional crosslinkers have the same reactive group on both ends of the spacer arm (i.e., Amine Reactive-Amine Reactive); while heterobifunctional crosslinkers have different reactive groups on each end of a spacer arm (i.e., Sulfhydryl Reactive-Amine Reactive).

Why Use Protein Crosslinkers?

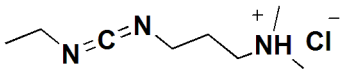
Crosslinkers have become important tools for the preparation of bioconjugates used in immunoassays and for probing protein-protein interactions by mass spectrometry, as well as other creative Crosslinking methodologies that include:

- Determining protein structure or spatial orientation of a protein
- Studying protein-protein interactions
- Forming carrier protein-hapten conjugates
- Covalently linking proteins to a solid surface
- Creating antibody-enzyme or fluorophore-peptides conjugates
- Analyzing enzyme activity and protein degradation

ProteoChem manufactures ultrapure, world-class crosslinkers at an exceptional value. We guarantee our protein Crosslinking reagents to work in your proteomics research and stand behind our products.

EDC-HCl (EDAC-HCl)

EDC-HCl (EDAC-HCl) zero-length crosslinker from ProteoChem is UltraPure, and is used to conjugate carboxyl functional groups to primary amines as found in peptides and proteins. It is ideal for covalently binding proteins or peptides to carboxyl containing beads, resins, or other nanoparticals. Sulfo-NHS or NHS is used as a catalyst for EDC-HCl coupling, increasing reaction efficiency.



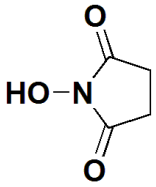
Size	Product Number	Price
3 x 10 mg	c1100-3x10mg	$29.00
100 mg	c1100-100mg	$35.00
5 grams	c1100-5gm	$47.00
25 grams	c1100-25gm	$61.00
100 grams	c1100-100gm	$161.00

Molecular Weight: 191.7 CAS #: 25952-53-8

Alternative Names: 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide HCl; N-(3-methylaminopropyl)-

NHS

N-hydroxysuccinimide (NHS) prolongs the lifetime of amino-reactive moieties formed at carboxylic acids and increases the efficiency.



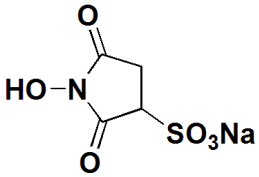
Size	Product Number	Price
25 grams	c1101-25gm	$32.00

Molecular Weight: 115.1 CAS #: 6066-82-6

Alternative Name: 1-Hydroxy-2, 5-pyrrolidinedione

Sulfo-NHS

N-hydroxysulfosuccinimide (Sulfo-NHS) is used in conjunction with EDC-HCl (EDAC-HCl) to convert carboxyl groups to Sulfo-NHS esters which react amines. Sulfo-NHS is used as a catalyst for EDC-HCl coupling and greatly increases the efficiency of the reaction.



Size	Product Number	Price
500 mg	c1102-500mg	$99.00
1 gram	c1102-1gm	$192.00
5 grams	c1102-5gm	$899.00

Molecular Weight: 217.1 CAS #: 106627-54-7

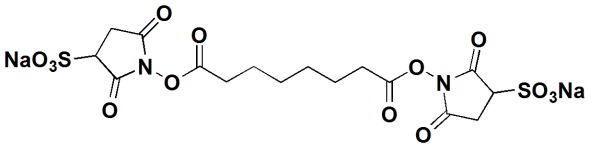
Alternative Name: Hydroxy-2,5-dioxoyrrolidine-3-sulfonate

Homobifunctional Crosslinkers

BS³

BS³ crosslinker (Bis[sulfosuccinimidyl] suberate; BS3) is a water soluble homobifunctional protein crosslinker. The 8-atom spacer arm of the BS³ crosslinking reagent is non-cleavable and the molecule is not cell membrane permeable. The BS³ protein crosslinker possesses amino reactive Sulfo-NHS esters on both ends of the molecule and can be used to prepare antibody-protein conjugates or for crosslinking cell surface proteins.

Size	Product Number	Price
100 mg	c1103-100mg	$85.00
1 gram	c1103-1gm	$800.00

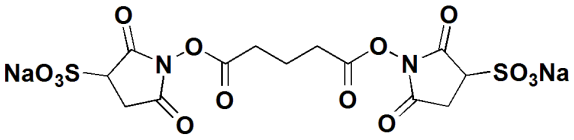


Molecular Weight: 572.4 CAS #: 82436-77-9 Spacer Length: 11.4 Å

Alternative Names: Suberic acid bis(3-sulfo-N-hydroxysuccinimide ester); BS3; Sulfo-DSS

BS2G

BS2G crosslinker (Bis[Sulfosuccinimidyl] glutarate) is a water soluble homobifunctional protein crosslinker. The BS2G protein crosslinker's 5-atom (7.7 angstrom) spacer arm is non-cleavable and the molecule is not cell membrane permeable. The BS2G crosslinking reagent's Sulfo-NHS esters are amino reactive and can be used to label cell surface proteins.



Size	Product Number	Price
100 mg	c1126-100mg	$97.00
1 gram	c1126-1gm	$847.00

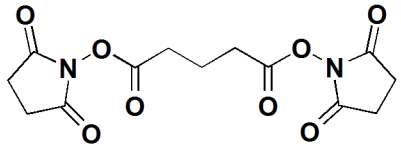
Molecular Weight: 530.4 Spacer Length: 7.7 Å

Alternative Names: Glutaric acid bis (3-sulfo-N-hydroxysuccinimide ester); Sulfo-DSG

DSG

DSG crosslinker (Disuccinimidyl glutarate) is a homobifunctional crosslinking reagent that is membrane permeable. DSG crosslinking takes place through amine-reactive NHS esters at both ends of a 5-atom (7.7 angstrom) spacer arm. DSG must be dissolved in an organic solvent, such as DMSO or DMF, then added to an aqueous crosslinking reaction.

Size	Product Number	Price
100 mg	c1104-100mg	$48.00
1 gram	c1104-1gm	$470.00

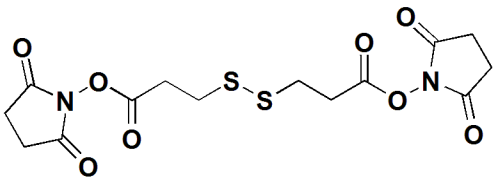


Molecular Weight: 326.3 CAS #: 79642-50-5 Spacer Length: 7.7 Å

Alternative Name: Di(N-succinimidyl) glutarate

DSP

Dithiobis(succinimidyl propionate) (DSP) is a homobifunctional crosslinker that is cell membrane permeable. DSP has amine-reactive N-hydroxysuccimide (NHS) esters at both ends of a cleavable, 8-atom (12.0 angstrom) spacer arm. DSP contains a reducible disulfide bond in the spacer arm that make it a good choice for various applications.



Size	Product Number	Price
100 mg	c1106-100mg	$67.00
1 gram	c1106-1gm	$145.00

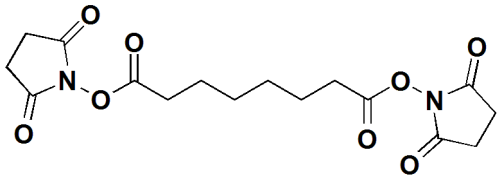
Molecular Weight: 404.4 CAS #: 57757-57-0 Spacer Length: 12.0 Å

Alternative Names: 3,3'-Dithiodipropionic acid di(N-hydroxysuccinimide ester); Lomant's Reagent

DSS

DSS crosslinker (Disuccinimidyl suberate) is a homobifunctional crosslinker that is cell membrane permeable. DSS has amine-reactive NHS esters at both ends of an 8-atom (11.4 angstrom) spacer arm. The DSS crosslinking reagent must be dissolved in an organic solvent, such as DMSO or DMF, then added to an aqueous crosslinking reaction.

Size	Product Number	Price
100 mg	c1105-100mg	$42.00
1 gram	c1105-1gm	$84.00

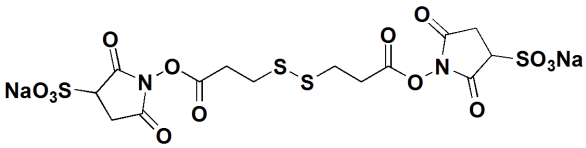


Molecular Weight: 368.4 CAS #: 68528-80-3 Spacer Length: 11.4 Å

Alternative Name: Suberic acid bis(N-hydroxysuccinimide)

DTSSP

DTSSP crosslinker (3,3´-Dithiobis[sulfosuccinimidylpropionate]) is a homobifunctional protein crosslinker that is cell membrane impermeable. DTSSP crosslinking reagent has primary amine-reactive N-hydroxysulfosuccinimide (Sulfo-NHS) esters at both ends of a cleavable, 8-atom (12.0 angstrom) spacer arm. DTSSP contains a reducible disulfide (thiol) bond in the spacer arm that make it a good choice for various applications.



Size	Product Number	Price
100 mg	c1107-100mg	$197.00
1 gram	c1107-1gm	$1,061.00

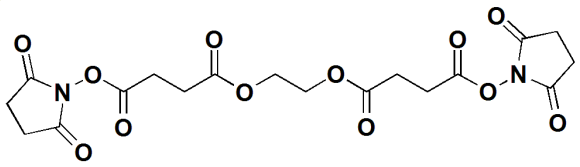
Molecular Weight: 608.5 CAS #: 81069-02-5 Spacer Length: 12.0 Å

Alternative Names: 1-[3-[3-(2,5-dioxo-3-sulfopyrrolidin-1-yl)oxy-3-oxopropyl]disulfanylpropanoyloxy]-2,5-dioxopyrrolidine-3-sulfonic acid; Sulfo-DSP; DTSP; DTBSSP

EGS

EGS crosslinker, Ethylene glycolbis(succinimidylsuccinate), is a water insoluble homobifunctional crosslinker. The 12-atom spacer arm of the EGS crosslinking reagent is cleavable. The EGS spacer arm is cleaved by hydroxylamine at pH 8.5 for 3-6 hours at 37°C. The EGS protein crosslinker possesses amino reactive NHS esters on both ends of the molecule and can be used to label intracellular proteins, since the molecule is cell membrane permeable.

Size	Product Number	Price
100 mg	c1130-100mg	$82.00
1 gram	c1130-1gm	$125.00

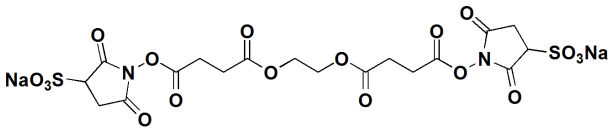


Molecular Weight: 456.36 CAS #: 70539-42-3 Spacer Length: 16.1 Å

Alternative Names: Ethylene glycol bis (succinimidylsuccinate); Ethylene Glycol-Bis (Succinic Acid N-Hydroxysuccinimide Ester)

Sulfo-EGS

Sulfo-EGS crosslinker, Ethylene glycolbis(sulfosuccinimidylsuccinate), is a water soluble homobifunctional crosslinker. The 12-atom spacer arm of Sulfo-EGS crosslinking reagent is cleavable. Sulfo-EGS spacer arm is cleaved by hydroxylamine at pH 8.5 for 3-6 hours at 37°C. The Sulfo-EGS protein crosslinker possesses amino reactive Sulfo-NHS esters on both ends of the molecule and can be used to label cell surface proteins, since the molecule is not cell membrane permeable.



Size	Product Number	Price
100 mg	c1129-100mg	$122.00
1 gram	c1129-1gm	$1,050.00

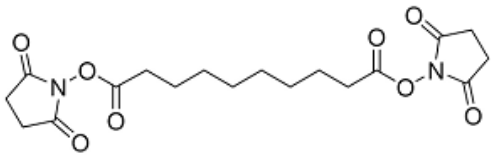
Molecular Weight: 660.45 Spacer Length: 16.1 Å

Alternative Names: Ethylene glycol bis (sulfosuccinimidylsuccinate); Ethylene Glycol-Bis (Succinic Acid N-Hydroxysulfosuccinimide Ester)

DSSeb

DSSeb (Disuccinimidyl sebacateis membrane permeable. DSSeb crosslinks via amine-reactive NHS esters at both ends of a 10-atom (14.1 Å) spacer arm and must dissolved in an organic solvent, such as DMSO or DMF, then added to an aqueous crosslinking reaction.

Size	Product Number	Price
100 mg	c1136-100mg	$79.00



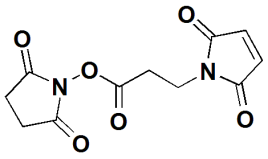
Molecular Weight: 396.39 CAS # 23024-29-5 Spacer Length: 14.1 Å

Alternative Names: Sebacic acid bis(N-hydroxysuccinimide ester); Di(N-succinimidyl) sebacate

BMPS

BMPS is a non-cleavable, water insoluble, heterobifunctional protein crosslinker that is commonly used to crosslink haptens to carrier proteins and enzymes to antibody. The BMPS crosslinker's spacer arm length of 5.9 angstroms is the shortest of the C_3 homolog of aliphatic spacer series (see also EMCS and GMBS). The BMPS crosslinking reagent's NHS ester and maleimide reactive groups react with amino and sulfhydryl moites, respectively.

Size	Product Number	Price
100 mg	c1122-100mg	$92.00
1 gram	c1122-1gm	$897.00

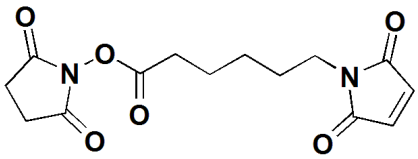


Molecular Weight: 266.2 CAS #: 55750-62-4 Spacer Length: 5.9 Å

Alternative Names: N-(beta-Maleimidopropyloxy)succinimide ester; N-Succinimidyl 3-maleimidopropionate; 3-Maleimidopropionic acid N-hydroxysuccinimide ester

EMCS

N-(e-Maleimidocaproyloxy)succinimide ester (EMCS) is a non-cleavable, water insoluble, heterobifunctional crosslinker that is commonly used to crosslink haptens to carrier proteins and enzyme to antibody. The EMCS crosslinker spacer arm is longer than GMBS. The EMCS NHS ester and maleimide reactive groups react with amino and sulfhydryl moieties, respectively.



Size	Product Number	Price
100 mg	c1123-100mg	$146.00
1 gram	c1123-1gm	$1,234.00

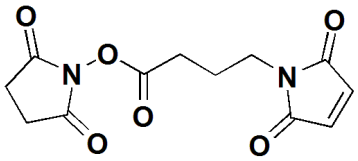
Molecular Weight: 308.3 CAS #: 55750-63-5 Spacer Length: 9.4 Å

Alternative Names: N-(epsilon-Malaimidocaproyloxy) succinimide; 6-maleimidohexanoic acid N-hydroxysuccinimide ester

GMBS

GMBS is a non-cleavable heterobifunctional protein crosslinker. The GMBS crosslinking reagent is commonly used to crosslink haptens to carrier proteins and enzymes to antibody. The GMBS has a spacer arm length of 7.3 angstroms and is less immunogenic than the crosslinking analog MBS. The GMBS crosslinking reagent's NHS ester and maleimide reactive groups react with amino and sulfhydryl moites, respectively.

Size	Product Number	Price
100 mg	c1124-100mg	$129.00
1 gram	c1124-1gm	$1,157.00



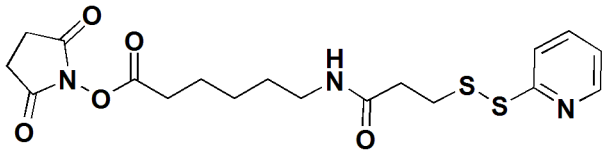
Molecular Weight: 280.2 CAS #: 80307-12-6 Spacer Length: 7.3 Å

Alternative Name: 4-Maleimdobutyric acid N-succinimidyl ester

LC-SPDP

LC-SPDP crosslinker is a cleavable, water insoluble, amino and thiol (sulfhydryl) reactive heterobifunctional protein crosslinker. The "long chain" LC-SPDP crosslinking reagent has a 15.7 angstrom spacer arm, compared to the 6.8 angstrom spacer arm of SPDP.

LC-SPDP reactive moieties consist of an N-hydroxysuccinimide (NHS) ester that reacts with primary amines, as found in lysine side chains and a pyridinyldisulfide, which reacts with sulhydryls to yield a reversible disulfide bond.



Size	Product Number	Price
100 mg	c1117-100mg	$297.00
1 gram	c1117-1gm	$2,197.00

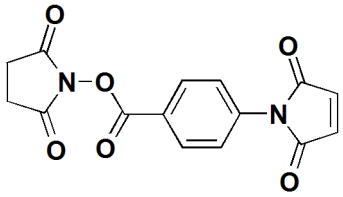
Molecular Weight: 425.5 Spacer Length: 15.7 Å

Alternative Name: Succinimidyl-6-(3-[2-pyridyldithiol-propionamido) hexanoate

MBS

MBS crosslinker is a non-cleavable, water insoluble, heterobifunctional protein crosslinking reagent that is commonly used to crosslink haptens to carrier proteins and enzymes to antibody. The MBS crosslinking reagent's NHS ester and maleimide reactive groups react with amino and sulfhydryl moites, respectively.

Size	Product Number	Price
100 mg	c1114-100mg	$64.00
1 gram	c1114-1gm	$497.00

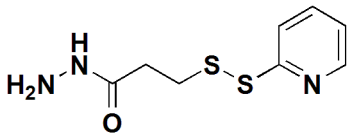


Molecular Weight: 314.3 CAS #: 58626-38-3 Spacer Length: 7.3 Å

Alternative Names: 3-Maleimidobenzoic acid N-hydroxysuccinimide ester; meta-maleimidobenzoyl-N-hydroxysuccinimide ester

PDPH

PDPH is a cleavable, heterobifunctional protein crosslinking reagent. The PDPH crosslinker's hydrazide group selectively reacts with oxidized carbohydrates (or carboxyls when used with EDC); while the pyridinyldisulfide moiety is reactive toward reduced thiols. Thus, PDPH protein crosslinker is an excellent choice for crosslinking glycoproteins and other polysaccharides.



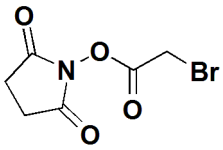
Size	Product Number	Price
100 mg	c1113-100mg	$161.00
1 gram	c1113-1gm	$1,247.00

Molecular Weight: 229.3 Spacer Length: 9.2 Å

Alternative Name: 3-[2-Pyridyldithio]propionyl hydrazide

SBA

SBA crosslinker (N-Succinimidyl bromoacetate) is a sulfhydryl (thiol) and amino reactive hetero-bifunctional protein crosslinking reagent. SBA crosslinker is non-cleavable and is among the shortest amine and sulfhydryl reactive crosslinking reagents known with a spacer arm length of only 1.5 Angstroms.



Size	Product Number	Price
100 mg	c1120-100mg	$63.00
1 gram	c1120-1gm	$419.00

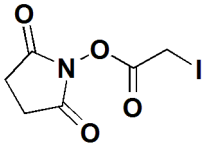
Molecular Weight: 236.02 CAS #: 42014-51-7 Spacer Length: 1.5 Å

Alternative Names: Bromoacetic acid N-hydroxysuccinimide ester; Succinimidyl bromoacetate

SIA

N-Succinimidyl iodoacetate (SIA) is a non-cleavable, heterobifunctional protein crosslinker. SIA is among the shortest amine and sulfhydryl (thiol) reactive crosslinkers known with a spacer arm length of 1.5 Angstroms.

Size	Product Number	Price
100 mg	c1119-100mg	$61.00
1 gram	c1119-1gm	$405.00

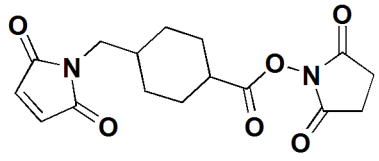


Molecular Weight: 283.02 CAS #: 39028-27-8 Spacer Length: 1.5 Å

Alternative Names: Iodoacetic acid N-hydroxysuccinimide ester; Succinimidyl iodoacetate

SMCC

SMCC crosslinker (Succinimidyl-4-[N-maleimidomethyl]cyclohexane-1-carboxylate) is a heterobifunctional protein crosslinker with a maleimide group that is sulfhydryl (thiol; -SH) reactive and a NHS ester group that is amine reactive. The SMCC crosslinking reagent is permeable across the lipid bilayer of the cell membrane. The 9 atom spacer arm of SMCC is not cleavable.



Size	Product Number	Price
100 mg	c1108-100mg	$99.00
1 gram	c1108-1gm	$755.00

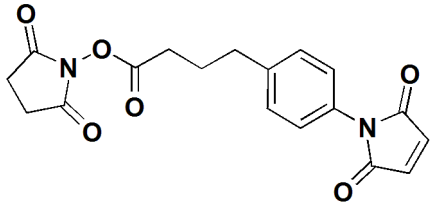
Molecular Weight: 334.3 CAS #: 64987-85-5 Spacer Length: 8.3 Å

Alternative Names: 4-(N-Maleimidomethyl)cyclohexanecarboxylic acid N-hydroxysuccinimide ester; N-Succinimidyl 4-(maleimidomethyl)cyclohexanecarboxylate

SMPB

SMPB crosslinker (N-Succinimidyl 4-[4-maleimidophenyl]butyrate) is a heterobifunctional protein crosslinking reagent that is reactive toward sulfhydryl and amino groups. The SMPB protein crosslinker is an extended chain length analog of MBS crosslinker.

Size	Product Number	Price
100 mg	c1121-100mg	$152.00
1 gram	c1121-1gm	$1,495.00

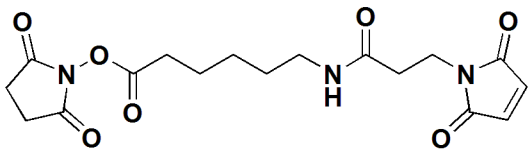


Molecular Weight: 356.3 CAS #: 79886-55-8 Spacer Length: 11.6 Å

Alternative Name: 4-(4-Maleimidophenyl)butyric acid N-hydroxysuccinimide ester

SMPH

SMPH crosslinker (Succinimidyl-6-[ß-maleimidopropionamido]hexanoate) is a water insoluble, heterobifunctional protein crosslinker with a non-cleavable spacer arm length of 14.3 angstroms. The SMPH crosslinking reagent has maleimide groups which are reactive to thiols (sufhydryls) and its NHS ester groups react with amines at pH 6.5-7.5 and 7-9, respectively.



Size	Product Number	Price
100 mg	c1112-100mg	$172.00
1 gram	c1112-1gm	$1,521.00

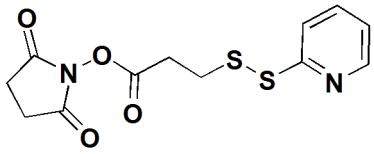
Molecular Weight: 379.4 Spacer Length: 14.3 Å

Alternative Name: Succinimidyl-6-[βmaleimidopropionamido] hexanoate

SPDP

SPDP crosslinker is a cleavable, water insoluble, amino and thiol (sulfhydryl) reactive heterobifunctional protein crosslinker. The SPDP crosslinking reagent's reactive moites consist of an N-hydroxysuccinimide (NHS) ester that reacts with primary amines. On the other end of SPDP, the pyridinyldisulfide reacts with sulhydryls to yield a reversible disulfide bond.

Size	Product Number	Price
100 mg	c1116-100mg	$129.00
1 gram	c1116-1gm	$1,055.00



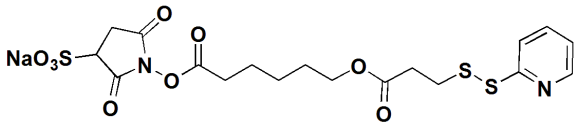
Molecular Weight: 312.4 CAS #: 68181-17-9 Spacer Length: 6.8 Å

Alternative Name: 3-(2-Pyridyldithio)propionic acid N-hydroxysuccinimide ester

Sulfo-LC-SPDP

Sulfo-LC-SPDP crosslinking reagent is a cleavable, water soluble, amino and thiol (sulfhydryl) reactive heterobifunctional protein crosslinker.

Sulfo-LC-SPDP crosslinker's reactive moites consist of an N-hydroxysulfosuccinimide (Sulfo-NHS) ester that reacts with primary amines. The other end of the Sulfo-LC-SPDP crosslinking molecule pyridinyldisulfide reacts with sulhydryls to yield a reversible disulfide bond.



Size	Product Number	Price
100 mg	c1118-100mg	$324.00
1 gram	c1118-1gm	$2,647.00

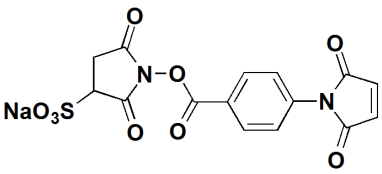
Molecular Weight: 527.6 Spacer Length: 15.7 Å

Alternative Name: Sulfosuccinimidyl-6-(3'-[2-pyridyldithio]-propionamido) hexanoate

Sulfo-MBS

Sulfo-MBS crosslinker (m-Maleimidobenzoyl-N-hydroxysulfosuccinimide ester) is a non-cleavable, water soluble, heterobifunctional protein crosslinking reagent that is commonly used to crosslink haptens to carrier proteins and enzymes to antibody. The Sulfo-MBS crosslinking reagent's NHS ester and maleimide reactive groups react with amine and sulfhydryl moites, respectively. MBS crosslinker is the water insoluble analog which is also offered by ProteoChem.

Size	Product Number	Price
100 mg	c1115-100mg	$149.00
1 gram	c1115-1gm	$1,147.00

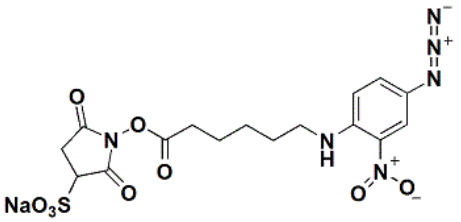


Molecular Weight: 416.3 Spacer Length: 7.3 Å

Alternative Names: 3-Maleimidobenzoic acid N-hydroxysulfosuccinimide ester; meta-Maleimidobenzoyl-N-hydroxysulfosuccinimide ester

Sulfo-SANPAH

Sulfo-SANPAH crosslinker (N-Sulfosuccinimidyl-6-[4'-azido-2'-nitrophenylamino] hexanoate) is a water soluble, heterobifunctional protein crosslinker with a spacer arm length of 18.2 Å. Sulfo-SANPAH crosslinking reagent contains an NHS ester that reacts with primary amines and a nitrophenylazide group that is photoreactive at 320-350 nm toward amino groups.



Size	Product Number	Price
100 mg	c1111-100mg	$209.00
1 gram	c1111-1gm	$1,857.00

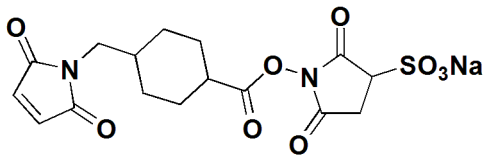
Molecular Weight: 492.4 CAS #: 102568-43-4 Spacer Length: 18.2 Å

Alternative Name: 1-[6-[(4-azido-2-nitro-phenyl)amino]hexanoyloxy]-2,5-dioxo-pyrrolidine-3-sulfonic acid

Sulfo-SMCC

Sulfo-SMCC crosslinker (Sulfosuccinimidyl-4-[N-maleimidomethyl]cyclohexane-1-carboxylate) is a water soluble, heterobifunctional crosslinker. Sulfo-SMCC crosslinking reagent has an 8.3 angstrom non-cleavable spacer arm and its maleimide group reacts with sulfhydryls (thiols), while the Sulfo-NHS ester is reactive toward primary amines. Sulfo-SMCC can be used to produce antibody-protein crosslinked conjugates or efficiently label cell surface proteins.

Size	Product Number	Price
100 mg	c1109-100mg	$149.00
1 gram	c1109-1gm	$1,197.00



Molecular Weight: 436.4 CAS #: 92921-24-9 Spacer Length: 8.3 Å

Alternative Name: 4-(N-Maleimidomethyl)cyclohexane-1-carboxylic acid 3-sulfo-N-hydroxysuccinimide ester

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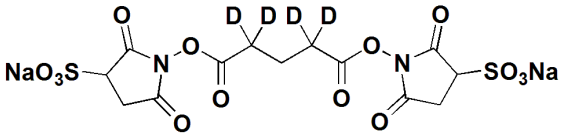
BS2G-d4

BS2G-d4 deuterated crosslinker, Bis(Sulfosuccinimidyl) 2,2,4,4-glutarate-d4, is a water soluble and cell membrane impermeable crosslinking agent with 4 deuterium atoms to provide a 4 dalton shift by mass spectrometry analysis. Use BS2G-d4 crosslinking reagent in combination with the non-deuterated form of BS2G c1126-100mg or c1126-1gm for mass spectrometry studies.



Size	Product Number	Price
10 mg	h5101-10mg	$117.00
50 mg	h5101-50mg	$455.00

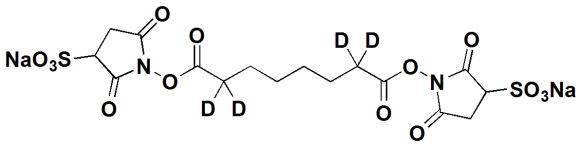
Molecular Weight: 534.37 Spacer Length: 7.7 Å

Alternative Names: Glutaric acid-2,2,4,4-d_4 bis (3-sulfo-N-hydroxysuccinimide ester) disodium salt; BS^2G-d_4

BS^3-d4

BS^3-d4 deuterated crosslinker, Bis(Sulfosuccinimidyl) 2,2,7,7-suberate-d4, is a water soluble and membrane impermeable crosslinking agent with 4 deuterium atoms to provide a 4 dalton shift by mass spectrometry. Use in combination with non-deuterated BS^3 c1103-100mg or c1103-1gm for mass spectrometry studies.

Size	Product Number	Price
10 mg	h5100-10mg	$122.00
50 mg	h5100-50mg	$457.00

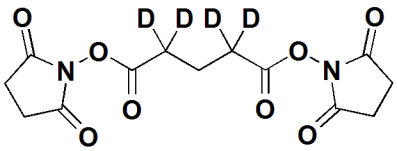


Molecular Weight: 576.45 Spacer Length: 11.4 Å

Alternative Names: Suberic acid-2,2,7,7-d4 bis (3-sulfo-N-hydroxysuccinimide ester) disodium salt; BS^3-d_4

DSG-d4

DSG-d4 deuterated protein crosslinker (Bis[Succinimidyl] 2,2,4,4-glutarate-d4) is a cell membrane permeable crosslinking agent with 4 deuterium atoms to provide a 4 dalton shift by mass spectrometry analysis. Use the DSG-d4 heavy protein crosslinker in combination with the light, non-deuterated analog DSG (c1104).for mass spectrometry studies.



Size	Product Number	Price
10 mg	h5103-10mg	$97.00
50 mg	h5103-50mg	$349.00

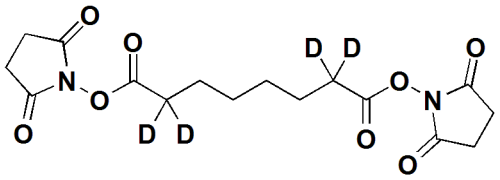
Molecular Weight: 330.28 Spacer Length: 7.7Å

Alternative Names: Glutaric acid-2,2,4,4-d4 bis (N-hydroxysuccinimide ester); DSG-d_4

DSS-d4

DSS-d4 deuterated crosslinker (Bis[Succinimidyl] 2,2,7,7-suberate-d4) is a cell membrane permeable crosslinking agent with 4 deuterium atoms that provide a 4 dalton shift by mass spectrometry analysis. Use DSS-d4 heavy crosslinker in combination with DSS, the light non-deuterated analog c1105-100mg or c1105-1gm, for mass spec studies.

Size	Product Number	Price
10 mg	h5102-10mg	$98.00
50 mg	h5102-50mg	$355.00



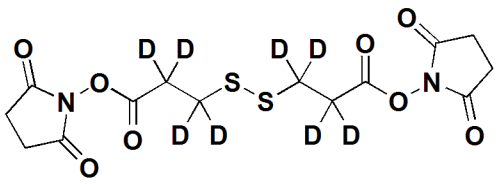
Molecular Weight: 372.36 Spacer Length: 11.4 Å

Alternative Names: Suberic acid-2,2,7,7-d4 bis (N-hydroxysuccinimide ester); DSS-d_4

DSP-d8

DSP-d8 deuterated protein crosslinker, Dithiobis(succinimidyl 2,2,3,3,6,6,7,7-propionate-d8), is a cell membrane permeable, homobifunctional protein crosslinker containing 8 deuterium atoms to provide an 8 dalton shift by mass spectrometry compared to non-deuterated DSP. DSP-d8 has amine-reactive NHS esters at both ends of a cleavable, 8-atom (12.0 angstrom) spacer arm. DSP-d8 contains a reducible disulfide bond (SS-bond) in the spacer arm. Use the DSP-d8 deuterated protein crosslinking reagent in combination with non-deuterated analog DSP for MS studies.

DSP-d8 crosslinker must be dissolved in an organic solvent, such as DMSO or DMF, and then added to an aqueous crosslinking reaction. Because DSP-d8 is cell membrane permeable it can be used to crosslink intracellular proteins.



Size	Product Number	Price
10 mg	h5104-10mg	$147.00
50 mg	h5104-50mg	$477.00

Molecular Weight: 412.46 Spacer Length: 12.0 Å

Alternative Names: Dithiobis(succinimidyl) propionate-d_8; DSP-d_8

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Protein Modification

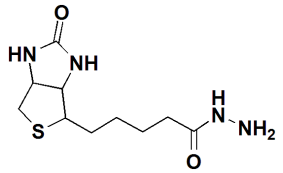
Protein modification reagents are useful for adding labels to or blocking functional groups on proteins, peptides, and other molecules. Common modifications include biotin-labeling, acetylation, and addition of a protected thiol group. Biotinylation Reagents, SATA, HPG, and Sulfo-NHS-Acetate are some of the best and most effective modification reagents available.

Biotinylation Reagents

Biotin Hydrazide

Biotin Hydrazide (Biotin-Hz) is a carbohydrate reactive biotinylation reagent. Biotin Hydrazide is a great choice for labeling mouse monoclonal antibodies, lectins, sugars, unpaired cytosine residues in nucleic acids, and glycoprotiens. Typically, Biotin Hydrazide is used for coupling glycoproteins through the carbohydrate by hydrazone formation.

Size	Product Number	Price
100 mg	b2106-100mg	$52.00
1 gram	b2106-1gm	$329.00

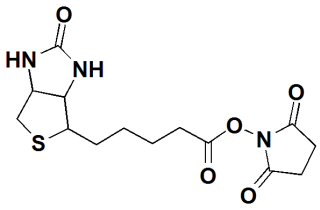


Molecular Weight: 258.3 CAS #: 66640-86-6 Spacer Length: 15.7 Å

Alternative Name: (+)-Biotin Hydrazide

NHS-Biotin

NHS-Biotin (Succinimidyl Biotin; Succinimidobiotin) is a primary amine reactive biotinylation reagent. The NHS-Biotin molecule is cell membrane permeable and can be used to covalently label intracellular proteins.



Size	Product Number	Price
100 mg	b2101-100mg	$74.00
1 gram	b2101-1gm	$605.00

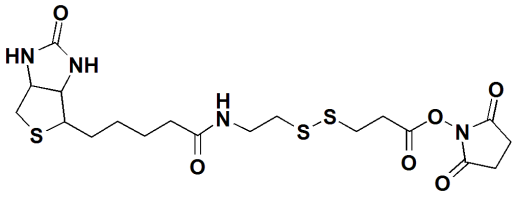
Molecular Weight: 341.4 CAS #: 35013-72-0 Spacer Length: 13.5 Å

Alternative Names: Succinimidobiotin; Biotin-OSU; Biotin N-hydroxysuccinimide ester

NHS-SS-Biotin

NHS-SS-Biotin, Succinimidyl-2-(biotinamido)-ethyl-1,3'-dithiopropionate, is an amine-reactive biotinylation reagent that contains a reducible disulfide. NHS-SS-Biotin is cell membrane permeable and has a long chain separating the biotin group from the amino-reactive NHS-ester (N-Hydroxysuccinimide ester). This product is often used to purify an antibody or other protein from a biotin specific affinity resin like immobilized streptavidin without exposing your protein of interest to denaturing conditions.

Size	Product Number	Price
100 mg	b2105-100mg	$189.00
1 gram	b2105-1gm	$1,067.00

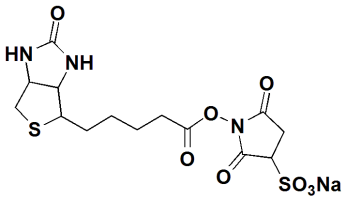


Molecular Weight: 504.7 CAS #: 142439-92-7 Spacer Length: 24.3 Å

Alternative Name: Biotin disulfide N-Hydroxysuccinimide ester

Sulfo-NHS-Biotin

Sulfo-NHS-Biotin (Sulfosuccinimidyl biotin) is a water soluble biotinylation reagent. It is amine reactive and has a spacer arm length of 13.5Å. The Sulfo-NHS-Biotin biotinylation reagent is ideal for biotinylating antibody or protein that can then be used for protein detection or immobilization. Sulfo-NHS-Biotin is particularly useful for targeting cell surface proteins.



Size	Product Number	Price
100 mg	b2100-100mg	$127.00
1 gram	b2100-1gm	$752.00

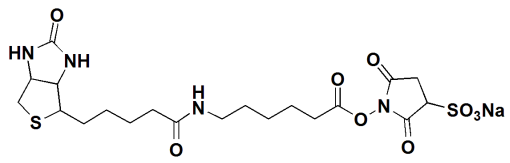
Molecular Weight: 443.4 CAS #: 119616-92-5 Spacer Length: 13.5 Å

Alternative Names: Biotin 3-sulfo-N-hydroxysuccinimide ester sodium salt; Sulfosuccinimidobiotin

Sulfo-NHS-LC-Biotin

Sulfo-NHS-LC-Biotin, Sulfosuccinimidyl 6-(biotinamido) Hexanoate, is a long chain water soluble biotinylation reagent that is reactive toward primary amine groups. Similar to Sulfo-NHS-Biotin (b2100-100mg and b2100-1gm), Sulfo-NHS-LC-Biotin is designed to target cell surface proteins. The sodium sulfonate groups lend water solubility to Sulfo-NHS-LC-Biotin and prevent it from crossing the lipid bi-layer of the cell membrane.

Size	Product Number	Price
100 mg	b2103-100mg	$152.00
1 gram	b2103-1gm	$905.00

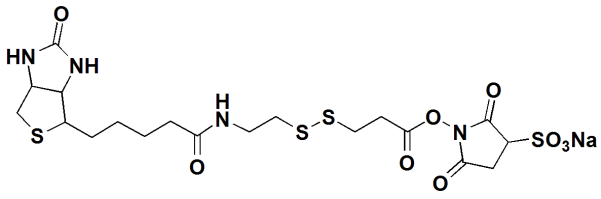


Molecular Weight: 556.6 CAS #: 128062-22-0 Spacer Length: 22.4 Å

Alternative Name: Biotinamidohexanoic acid 3-sulfo-N-hydroxysuccinimide ester sodium salt

Sulfo-NHS-SS-Biotin

Sulfosuccinimidyl-2-(biotinamido)-ethyl-1,3'-dithiopropionate (Sulfo-NHS-SS-Biotin) is a cleavable, water-soluble, amino-reactive biotinylation reagent. This molecule is cell membrane impermeable due to its sodium sulfonate group. Sulfo-NHS-SS-Biotin has a long chain spacer arm separating the biotin group from the amino-reactive sulfo-NHS ester moity. It is possible to cleave the biotin group from the crosslinked target protein under reducing conditions, such as in the presence of BME, DTT or TCEP.



Size	Product Number	Price
100 mg	b2104-100mg	$172.00
1 gram	b2104-1gm	$947.00

Molecular Weight: 606.7 CAS #: 202057-28-1 Spacer Length: 24.3 Å

Alternative Name: Biotin disulfide N-Hydroxysulfosuccinimide ester

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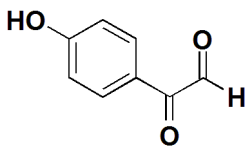
Other Modifications

HPG

HPG protein modification reagent (p-Hydroxyphenylglyoxal) reacts with arginine residues to give a large increase in absorbance at approximately 340 nm. The HPG is a better choice for amino acid side chain modification due to its increased water solubility over phenylglyoxal and improved oxidation resistance over p-nitrophenylglyoxal. Chemical Formula: $C_8H_8O_4$

Size	Product Number	Price
100 mg	m3101-100mg	$57.00
1 gram	m3101-1gm	$351.00

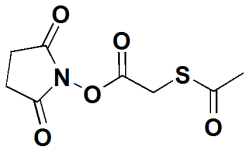


Molecular Weight: 168.2 CAS #: 24645-80-5

Alternative Names: p-Hydroxyphenylglyoxal monohydrate; 4-hydroxyphenylglyoxal; (P-Hydroxyphenyl)Glyoxal

SATA

SATA (N-Succinimidyl-S-Acetyl-Thioacetate) is a protein modification reagent used to convert primary amine groups into protected sulfhydryls (thiol; -SH). The sulfhydryl is readily made available for use in subsequent reactions after exposure to hydroxylamine.



Size	Product Number	Price
100 mg	m3100-100mg	$74.00
1 gram	m3100-1gm	$697.00

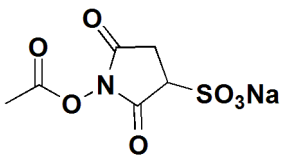
Molecular Weight: 231.2 CAS #: 76931-93-6 Spacer Length: 2.8 Å

Alternative Names: S-Acetylthioglycolic acid N-hydroxysuccinimide ester, N-Succinimidyl (acetylthio) acetate, N-Succinimidyl S-acetylthioglycolate, S-Acetylthioglycolic acid NHS ester

Sulfo-NHS Acetate

Sulfo-NHS-Acetate acylating agent (Sulfosuccinimidyl Acetate) is a water soluble. Sulfo-NHS-Acetate irreversibly reacts with primary amines, such as in lysine, at pH greater than 7 to yield the acylated form. Using Sulfo-NHS Acetate prevents polymerization when performing protein crosslinking reactions.

Size	Product Number	Price
100 mg	m3102-100mg	$85.00
1 gram	m3102-1gm	$735.00



Molecular Weight: 259.17 CAS #: 152305-87-8

Alternative Names: 1-acetyloxy-2,5-dioxopyrrolidine-3-sulfonic acid; 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo-; 3-Sulfosuccinimid-1-yl acetate; 1-acetyloxy-2,5-dioxopyrrolidine-3-sulfonic acid

Immobilized Products (Resins)

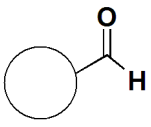
Activated immobilization resins from ProteoChem can aid your research by facilitating the production of your immobilized ligand of choice. Whether you have proteins such as enzymes, antibody or simple peptides, ProteoChem has the activated resin for you.

Activated Resins (For Immobilization)

Amino-Reactive Resin

Amino-Reactive Resin is an activated amine reactive agarose resin that is a great choice for immobilizing antibody, protein, or peptides in order to make affinity resins for column chromatography that can purify your protein of choice.

Amino-Reactive Resin is a chemically modified resin with aldehyde molecules immobilized on 6% crosslinked agarose. The bead size is 45 to 165 um. Primary amines, as found in lysine residues of proteins and peptides, can be immobilized and covalently bound to the activated agarose resin to create your specific affinity chromatography resin.



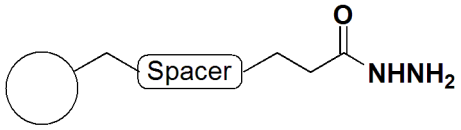
Size	Product Number	Price
15 mL	g4102-15ml	$109.00
50 mL	g4102-50ml	$299.00
250 mL	g4102-250ml	$1,327.00

Carbohydrate-Reactive Resin

Carbohydrate-Reactive Resin coupling resin is used for immobilizing glycoproteins. Carbohydrate-Reactive Resin is supplied as a 50% slurry (15 mL resin = 30 mL slurry).

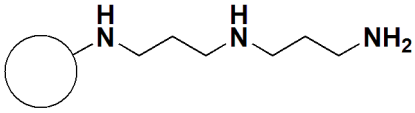
Carbohydrate-Reactive Resin is a chemically modified resin with a hydrazide group immobilized on 6% crosslinked agarose. The bead size is 45 to 165 um. This reaction takes place by oxidizing the carbohydrate group on your glycoprotein with Sodium meta-periodate and combining with the resin. The spacer arm in this resin enables increased coupling efficiency by reducing sterics.

Size	Product Number	Price
15 mL	g4103-15ml	$121.00
50 mL	g4103-50ml	$342.00
250 mL	g4103-250ml	$1,379.00



Carboxyl-Reactive Resin

Carboxyl-Reactive Resin (Immobilized DADPA) is a useful resin containing an 8-atom spacer arm and a free primary amine (-NH_2). This resin can be used to immobilize carboxylic acid (-COOH) containing compounds or proteins when used in combination with EDC (c1100). Immobilized DADPA is supplied as a 50% slurry (15 mL resin = 30 mL slurry).



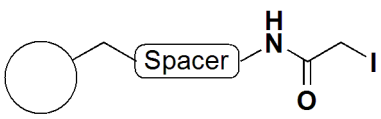
Size	Product Number	Price
15 mL	g4104-15ml	$79.00
50 mL	g4104-50ml	$197.00
250 mL	g4104-250ml	$795.00

Sulfhydryl-Reactive Resin

Sulfhydryl-Reactive Resin coupling resin is a great choice for immobilizing cysteine containing peptides or protein in order to make your very own affinity resin and purify your antibody or protein of choice. Sulfhydryl-Reactive Resin is supplied as a 50% slurry (15 mL resin = 30 mL slurry).

Sulfhydryl-Reactive Resin is a chemically modified resin with iodoacetyl molecules immobilized on 6% crosslinked agarose. The bead size is 45 to 165 um. Sulfhydryl (thiol; -SH) containing peptides and protein can be covalently bound to Sulfhydryl-Reactive Resin to create your specific affinity chromatography resin.

Size	Product Number	Price
15 mL	g4101-15ml	$137.00
50 mL	g4101-50ml	$394.00
250 mL	g4101-250ml	$1,588.00



Immobilized Chymotrypsin

ProteoChem's Immobilized Chymotrypsin is used to hydrolyze proteins preferentially at tyrosine residues with minimal Chymotrypsin autolysis by-products or other protease contaminants. Immobilized Chymotrypsin is TLCK treated to remove tryptic activity. Recommended reaction conditions are pH 7.5 to 9.0 at 37°C.

Size	Product Number	Price
2 mL	g4105-2ml	$65.00
5 mL	g4105-5ml	$128.00
15 mL	g4105-15ml	$299.00

Immobilized Pepsin

ProteoChem's Immobilized Pepsin is used to hydrolyze protein non-specifically at pH 1.0 to 3.0, with an optimum activity at pH 1.0. This protease cleaves non-specifically with some preference for tyrosines and phenylalanine (aromatic residues), although it generally does not cleave at alanine, glycine or valine residues. Recommended conditions are pH 1-3, 20°C to 37°C.

Size	Product Number	Price
5 mL	g4106-5ml	$115.00
15 mL	g4106-15ml	$297.00
50 mL	g4106-50ml	$950.00

Immobilized Trypsin

ProteoChem's highly active Immobilized Trypsin is used to cleave proteins at the carboxyl side of Lys and Arg residues with minimal trypsin autolysis byproducts or other protease contaminants. Immobilized Trypsin is TPCK treated to remove chymotryptic activity. Recommended reaction conditions are pH 7.5 to 9.0 at 37°C.

Size	Product Number	Price
2 mL	g4107-2ml	$61.00
5 mL	g4107-5ml	$119.00
15 mL	g4107-15ml	$287.00

Purified Enzymes

Alkaline Phosphatase

35,000 units of Alkaline Phosphatase (AP; CIAP) is ideal for labeling proteins such as streptavidin and antibody. The AP labeled proteins can be used in immunoblotting and immunocytochemistry diagnostic applications, including ELISA or Western blotting.

AP activity is > 1,620 units/mg of protein (one unit equals the amount of enzyme that will hydrolyze 1.0 micromole of p-nitrophenol phosphate per minute at 25°C and pH 9.6) and is supplied as a liquid in 0.005 M Tris, pH 7. 35 kU is ~20 mg of actual protein. CAS #: 9001-78-9

Size	Product Number	Price
35,000 units	e7101-35ku	$689.00

Chymotrypsin

Chymotrypsin is a protease that cleaves peptide bonds at Trp, Tyr, Phe, Leu, Met. This protease is generally specific for hydrophobic residues and is often used to provide complementary sequence coverage when compared to tryptic digested samples. ProteoChem's Chymotrypsin is TLCK treated to remove trypsin activity and has a minimum activity of 45 units per mg.

Size	Product Number	Price
100 mg	e7102-100mg	$67.00

Horseradish Peroxidase

Horseradish Peroxidase (HRP) is ideal for labeling protein such as streptavidin and antibody. The HRP labeled proteins can be used in immunoblotting and immunocytochemistry diagnostic applications, including ELISA assays and Western blotting.

ProteoChem's HRP activity is typically > 270 units/mg (one unit equals the amount of enzyme that will catalyze 1 mg of purpurogallin from pyrogallol in 20 seconds at 20°C and pH 6.0).

Molecular Weight: 40,000 CAS #: 9003-99-0

Size	Product Number	Price
10 mg	e7100-10mg	$55.00
100 mg	e7100-100mg	$163.00

Purified Enzymes

Pepsin

Pepsin is a non-specific endopeptidase active at pH 1.0 to 3.0, with an optimum activity at pH 1.0. This protease cleaves preferentially at tyrosines and phenylalanine (aromatic residues), although it generally does not cleave at alanine, glycine or valine residues. ProteoChem's Pepsin A has a minimum activity of 2,500 units per mg.

Size	Product Number	Price
100 mg	e7103-100mg	$29.00

Trypsin

Trypsin is a protease that cleaves peptide bonds with selectivity for Arg and Lys residues. Optimum protease activity is achieved at pH 8.0 to 9.0. ProteoChem's Trypsin is supplied as a lyophilized powder with minimum activity of 180 units per mg. This product is TPCK treated to remove chymotryptic activity.

Size	Product Number	Price
100 mg	e7104-100mg	$79.00

Streptavidin

Streptavidin is a biotin-binding protein purified from Streptomyces avidinii with a near neutral isoelectric point. Streptavidin is composed of 4 identical polypeptide chain subunits, which binds 4 moles of biotin per mole of protein with a high affinity (Kd ~10-15). ProteoChem's high purity streptavidin has a specific activity >14.0 U/mg of protein and is predominantly a single band by SDS-PAGE (Molecular Weight: ~52,000 daltons). Streptavidin is lyophilized and may be reconstituted with water.

Biotinylate your protein or antibody of interest using ProteoChem's Biotinylation Reagents for use in conjunction with streptavidin.

Size	Product Number	Price
5 mg	e7105-5mg	$125.00

Purified Detergents

ProteoChem's purified detergent aqueous solutions have low peroxide content and low carbonyl content. The 10% (w/v) solutions of purified Polysorbate 20, Polysorbate 80, Polyoxyethylene (23) lauryl ether, Nonidet* P-40, Triton** X-100, and Triton X-114 can be used to solubilize membrane proteins, reduce non-specific binding in ELISAs or IHC, aid in cell membrane lysis, and other protein research applications. Pharmaceutical use of purified detergent solutions include stabilizing emulsions and suspensions.

ProteoChem's purified surfactant solutions are the best available. Their stability and purity is the industry leader (< 1.0 µeq/ml peroxides and carbonyls).

Purified Polyoxyethylene (23) Lauryl Ether

Purified Polyoxyethylene (23) lauryl ether detergent (surfactant) is supplied as a 10% aqueous solution.

Less than 1.0 µeq/ml peroxides and carbonyls.

Size	Product Number	Price
50 mL	f1002-50ml	$59.00

Purified Nonidet P-40

Purified Nonidet P-40 (NP-40) detergent (surfactant) is supplied as a 10% aqueous solution.

Less than 1.0 µeq/ml peroxides and carbonyls.

Size	Product Number	Price
50 mL	f1003-50ml	$59.00

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*Nonidet is a trademark of Shell International Petroleum Company Limited, U.K.
**Triton is a registered trademark of Dow Chemical Co.

Purified Triton X-100

Purified Triton X-100 detergent (surfactant) is supplied as a 10% aqueous solution. Less than 1.0 µeq/ml peroxides and carbonyls.

Size	Product Number	Price
50 mL	f1004-50ml	$59.00

Purified Triton X-114

Purified Triton X-114 detergent (surfactant) is supplied as a 10% aqueous solution. Less than 1.0 µeq/ml peroxides and carbonyls.

Size	Product Number	Price
50 mL	f1005-50mL	$59.00

Purified Polysorbate 20

Purified Polysorbate 20 detergent (surfactant) is supplied as a 10% aqueous solution. Less than 1.0 µeq/ml peroxides and carbonyls..

Size	Product Number	Price
50 mL	f1000-50mL	$59.00

Purified Polysorbate 80

Purified Polysorbate 80 detergent (surfactant) is supplied as a 10% aqueous solution. Less than 1.0 µeq/ml peroxides and carbonyls.

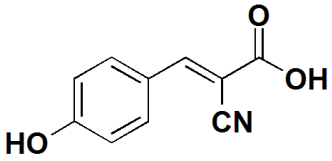
Size	Product Number	Price
50 mL	f1001-50mL	$59.00

UltraPure MALDI Matrices

CHCA

α-Cyano-4-hydroxycinnamic acid (CHCA) is a commonly used MALDI mass spectrometry (MALDI-MS) reagent with a λ_{max} at 337 nm and 355 nm. CHCA is a good first choice for MALDI-MS to use with proteins and peptides less than 10 kDa.

Size	Product Number	Price
25 mg	p9100-25mg	$17.00
5 x 10 mg	p9100-5x10mg	$40.00
4 x 25 mg	p9100-4x25mg	$47.00
1 grams	p9100-1gm	$230.00

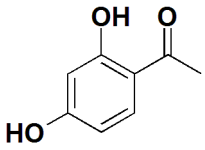


Molecular Weight: 189.17 CAS #: 28166-41-8

Alternative Names: 4-HCCA, HCCA and ACCA

DHAP

2',4',-Dihydroxyacetophenone (DHAP) is a specialized MALDI matrix primarily used for MALDI mass spectrometry of glycoproteins and mixtures containing glycoproteins.



Size	Product Number	Price
25 mg	p9105-25mg	$17.00
5 x 10 mg	p9105-5x10mg	$40.00
4 x 25 mg	p9105-4x25mg	$47.00
1 grams	p9105-1gm	$230.00

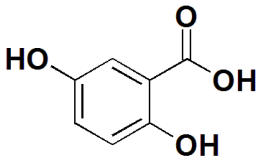
Molecular Weight: 152.15 CAS #: 89-84-9

Alternative Name: 2'-4'-Dihydroxyacetophenone

DHB

2,5-dihydroxybenzoic acid (DHB) is a MALDI mass spectrometry (MALDI-MS) matrix with λ_{max} at 337 nm and 355 nm. DHB is a good MALDI matrix for general MALDI-MS of carbohydrates, oligosacharides, glycopeptides and both proteins and peptides below 10 kDa.

Size	Product Number	Price
25 mg	p9101-25mg	$17.00
5 x 10 mg	p9101-5x10mg	$40.00
4 x 25 mg	p9101-4x25mg	$45700
1 grams	p9101-1gm	$230.00

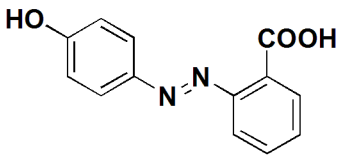


Molecular Weight: 154.12 CAS #: 490-79-9

Alternative Names: Gentixic acid; Hydroquinonecarboxylic acid

HABA

2-(4'-Hydroxybenzeneazo)benzoic acid (HABA) can be used as a MALDI mass spectrometry (MALDI-MS) matrix and has a strong absorbance at 337 nm. HABA is recommended for use to analyze oligosacharides or intact proteins.



Size	Product Number	Price
25 mg	p9103-25mg	$17.00
5 x 10 mg	p9103-5x10mg	$40.00
4 x 25 mg	p9103-4x25mg	$47.00
1 grams	p9103-1gm	$230.00

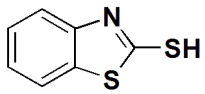
Molecular Weight: 242.23 CAS #: 1634-82-8

Alternative Name: 4'-Hydroxyazobenzene-2-carboxylic acid

MBT

2-Mercaptobenzothiazole (MBT) is a MALDI mass spectrometry (MALDI-MS) matrix that works well large proteins >10 kDA with a λ_{max} at 327 nm. MBT is also a good choice for peptidoglycans. Dissolve right in the plastic tube to get your saturated matrix solution!

Size	Product Number	Price
25 mg	p9106-25mg	$1700
5 x 10 mg	p9106-5x10mg	$40.00
4 x 25 mg	p9106-4x25mg	$47.00
1 grams	p9106-1gm	$230.00

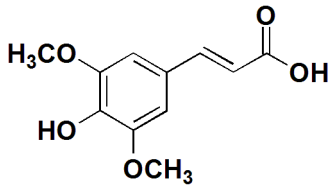


Molecular Weight: 167.25 CAS #: 149-30-4

Alternative Name: 2-Mercaptobenzothiazole

Sinapinic Acid

Sinapinic Acid (SA) is a commonly used MALDI mass spectrometry (MALDI-MS) reagent with a λ_{max} at 337 nm and 355 nm. Sinapinic acid is an ideal choice for large peptides or proteins with molecular weights larger than 10 kDa. Dissolve right in the plastic tube to get your saturated matrix solution!



Size	Product Number	Price
25 mg	p9102-25mg	$17.00
5 x 10 mg	p9102-5x10mg	$40.00
4 x 25 mg	p9102-4x25mg	$47.00
1 grams	p9102-1gm	$230.00

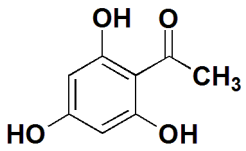
Molecular Weight: 224.21 CAS #: 530-59-6

Alternative Names: Sinapic Acid, SA, 3,5-dimethoxy-4-hydroxycinnamic acid, 4-Hydroxy-3,5-dimethoxy-cinnamic acid

THAP

2',4',6'-Trihydroxyacetophenone monohydrate (THAP) is specialized MALDI matrix used for the MALDI mass spectrometry (MALDI-MS) of glycoproteins or RNA. THAP is also useful in providing complimentary peptide mapping data, when used in alongside a standard MALDI matrix, CHCA or DHB. This matrix is also well suited for the negative ion MALDI-MS glycolipids. Dissolve right in the plastic tube to get your saturated matrix solution!

Size	Product Number	Price
25 mg	p9104-25mg	$17.00
5 x 10 mg	p9104-5x10mg	$40.00
4 x 25 mg	p9104-4x25mg	$47.00
1 grams	p9104-1gm	$230.00



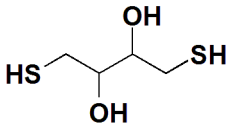
Molecular Weight: 186.16 CAS #: 480-66-0

Alternative Name: 2-Acetylphloroglucinol, 2',4',6'-Trihydroxyacetophenone monohydrate

Chemical Reagents

DTT

Pre-weighed dithiothreitol (DTT) reducing agent conveniently packaged as 5 x 10 mg tubes.



Size	Product Number	Price
5 x 10 mg	cr8101-5x10mg	$19.00
25 x 10 mg	cr8101-25x10mg	$65.00
1 gram	cr8101-1gm	$55.00

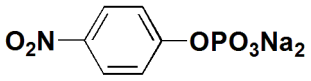
Molecular Weight: 154.25 CAS #: 3483-12-3

Alternative Names: Cleland's Reagent; threo-1,4-Dimercapto-2,3-butadiol

pNPP

p-Nitrophenylphosphate (pNPP) is a chromogenic substrate for Alkaline phophatase (AP) in ELISA and other immunoassays. Under AP influence pNPP decays to yellow para-nitrophenol which is then measured spectrophotometrically at 405 nm. pNPP is supplied as a powder and is stored frozen.

Size	Product Number	Price
5 grams	cr8102-5gm	$30.00

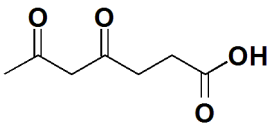


Molecular Weight: 217.07 CAS #: 4264-83-9

Alternative Name: para-Nitrophenylphosphate

Succinylacetone

Succinylacetone is an enzyme inhibitor of delta-aminolevulinate dehydratase. It is known to inhibit heme biosynthesis. Succinylacetone is water soluble up to 50 mg/ml.



Size	Product Number	Price
100 mg	cr8100-100mg	$189.00

Molecular Weight: 158.15 CAS #: 51568-18-4

Alternative Name: 4,6-Dioxoheptanoic acid

Mass Spectrometry Standards

Leu-Enkephalin

This purified peptide can be used for calibration of mass spectrometers. Leu-Enkephalin gives a monoisotopic mass of 556.277 $[M + H]^+$ and average mass of 556.6 $[M + H]^+$. Conveniently dissolve Leu-Enkaphalin peptide right in the tube with buffer or matrix solution then analyze by MALDI-MS or ESI-MS.

Size	Product Number	Price
3 x 10 µg	s6100-3x10ug	$49.00
100 µg	s6100-100ug	$126.00

Molecular Weight: 555.6 Monoisotopic Mass $[M+H]^+$: 556.277

Gonadoliberin

This purified peptide can be used for calibration of mass spectrometers. This peptide gives a monoisotopic mass of 1182.581 $[M + H]^+$ and average mass of 1183.3 $[M + H]^+$. Conveniently dissolve Gonadoliberin peptide right in the tube with buffer or matrix solution then analyze by MALDI-MS or ESI-MS.

Size	Product Number	Price
3 x 10 µg	s6101-3x10ug	$48.00
100 µg	s6101-100ug	$127.00

Molecular Weight: 1181.6 Monoisotopic Mass $[M+H]^+$: 1182.581

Angiotensin I

This purified peptide can be used for calibration of mass spectrometers. This peptide gives a monoisotopic mass of 1296.685 $[M + H]^+$ and average mass of 1297.5 $[M + H]^+$. Conveniently dissolve Angiotensin I peptide right in the tube with buffer or matrix solution then analyze by MALDI-MS or ESI-MS.

Size	Product Number	Price
3 x 10 µg	s6102-3x10ug	$49.00
100 µg	s6102-100ug	$129.00

Molecular Weight: 1295.7 Monoisotopic Mass [M+1]: 1296.685

Neurotensin

This purified peptide can be used for calibration of mass spectrometers. This peptide gives a monoisotopic mass of 1690.928 $[M + H]^+$ and average mass of 1692.0 $[M + H]^+$. Conveniently dissolve Neurotensin peptide right in the tube with buffer or matrix solution then analyze by MALDI-MS or ESI-MS.

Size	Product Number	Price
3 x 10 ug	s6103-3x10ug	$47.00
100 ug	s6103-100ug	$127.00

Molecular Weight: 1691.0 Monoisotopic Mass $[M+H]^+$: 1690.928

Peptide Calibration Standard Set

This mixture of four peptides is intended to be used for calibration of mass spectrometers. Why calibrate your mass spectrometer with irrelevant standards, when you can use ProteoChem's peptide standards that are similar to your samples?

Each tube contains 4 purified peptides: Leu-Enkephalin, Gonadoliberin, Angiotensin I, and Neurotensin. Conveniently dissolve this mixture of peptides right in the tube with buffer or matrix solution then analyze by MALDI-MS or ESI-MS.

Available in two sizes
3 x 10 µg (Each tube contains 10 µg of each peptide. A total of 40 µg of peptide in each tube)
100 µg (One tube with 100 µg of each of the four peptides. A total of 400 µg)

Size	Product Number	Price
3 x 10 ug (120 µg total)	s6104-3x10ug	$79.00
100 ug (400 µg total)	s6104-100ug	$199.00

Molecular Weights: 555.6, 1181.6, 1295.7, 1691

Monoisotopic Masses $[M+H]^+$: 556.277, 1182.581, 1296.685, 1690.928

LCMS Mobile Phases

Acetic Acid (Proteomics Grade)

Acetic acid is a common mobile phase additive used in HPLC and LCMS, however, not all acetic acids are the same. Contaminated mobile phases can cause baseline inconsistencies thereby decreasing UV signal and mass spectrometric signal. ProteoChem's Proteomics Grade Acetic acid is recommended for HPLC and LCMS applications where mobile phase purity is essential.

Each ampule contains 1.0 mL of Proteomics Grade Acetic Acid, making preparing 0.1% v/v Acetic acid a snap (1 ampule in 1 liter of solvent).

Size	Product Number	Price
10 x 1.0 mL	LC6200-10amps	$45.00

Molecular Weight: 60.05 CAS #: 64-19-7

Alternative Names: Ethanoic acid; Glacial Acetic acid

Formic Acid (Proteomics Grade)

Formic Acid is a common mobile phase additive used in many HPLC and LCMS applications. Our Proteomics Grade Formic Acid is of exceptional quality, and pure enough for the most sensitive applications. Formic acid can help improve peak shape, increase peak resolution, and will improve signal in positive ion mass spectrometry ionization.

Each ampule contains 1.0 mL of Proteomics Grade Formic Acid, making preparing 0.1% v/v Formic Acid a snap (1 ampule in 1 liter of solvent).

Size	Product Number	Price
10 x 1.0 mL	LC6201-10amps	$44.00

Molecular Weight: 46.03 CAS #: 64-18-6

Alternative Name: Methanoic acid

Formic Acid + TFA (Proteomics Grade)

A common mobile phase used in peptide LCMS and other LCMS applications is 0.1% Formic acid w/ 0.01% TFA. This mobile phase is intended to increase the MS signal obtained (versus TFA alone), while still obtaining the chromatographic benefits of TFA. This concentration of TFA and Formic Acid is ideal for giving adequate separation with minimal ion suppression due to ion pairing effects.

Each ampule contains 1.0 mL of Proteomics Grade Formic Acid and 0.1 mL of Proteomics Grade TFA, making preparing 1 liter of mobile phase at 0.1% v/v Formic Acid + 0.01% TFA a snap (1 ampule in 1 liter of solvent).

Size	Product Number	Price
10 x 1.0 mL	LC6202-10amps	$49.00

Molecular Weight: Mixture of Compounds CAS #: N/A

TFA (Proteomics Grade)

Triflouroacetic acid is an effective ion pairing agent regularly used to resolve chromatographically similar analytes. In peptide separations, it is proven to improve peak shape and resolution.

ProteoChem's Trifluoroacetic acid (TFA) is among the highest purity TFA available. Its high purity and low absorbance cut-off makes it perfect for use in preparing mobile phases for HPLC and LCMS applications.

Each ampule contains 1.0 mL of Proteomics Grade TFA, making preparing 0.1% v/v TFA a snap (1 ampule in 1 liter of solvent).

Size	Product Number	Price
10 x 1.0 mL	LC6203-10amps	$47.00

Molecular Weight: 114.03 CAS #: 76-05-1

HFBA (Proteomics Grade)

Heptafluorobutyric Acid (HFBA) is an ion pairing agent for reverse-phase HPLC separation of peptides or proteins. ProteoChem's HFBA purity is > 99.5% to maximize sensitivity of your assay. HFBA provides sensitive low UV wavelength nondestructive peptide detection in reverse-phase HPLC protein and peptide separation systems. HFBA is packaged in 1 mL ampules for your convenience - It takes only seconds to prepare 1 liter of fresh 0.1% heptafluorobutyric acid solution mobile phase for reverse-phase chromatography.

Size	Product Number	Price
10 x 1.0 mL	LC6206-10amps	$49.00

Molecular Weight: 214.04 CAS #: 375-22-4

ProteoChem strives to provide the best quality products at the best possible price. We are a company that prides itself on exceptional customer service and fast response times to orders and inquiries. Please let us know if you think there are areas where we can improve. If you like what you see, or have had a good experience with ProteoChem, we like to hear about that as well.

We are constantly adding products to our catalog and website. If you don't see what you are looking for please call 888.501.CHEM or e-mail us at info@ProteoChem.com to request a custom quote or just to tell us what you would like to see offered. All of ProteoChem's products are offered in bulk quantities. Please call or e-mail us for a bulk quotation.

ProteoChem wants your research to succeed, let one of our technical service representatives help you solve your research problems. Call 888.501.CHEM and dial extension 2 for technical support.

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ProteoChem

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