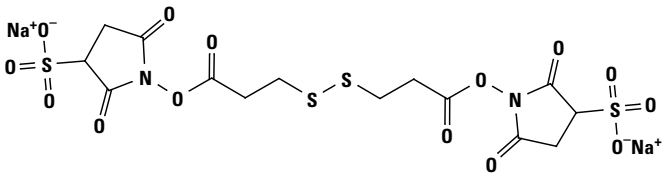
DTSSP (Sulfo-DSP), Thermo Scientific Pierce

Thermo SCIENTIFIC NEW PN



DTSSP
M.W. 608.51
Spacer Arm 12.0 Å

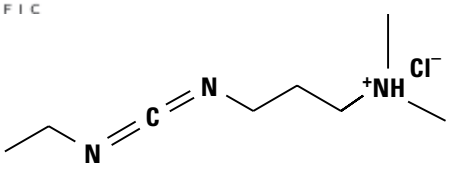
Membrane impermeable, thiol-cleavable.

- Water soluble
- Cleavable by reducing agents
- Reactive groups: sulfo-NHS ester (homobifunctional)
- Reactive toward: amino groups

Catalogue No	Description	Quantity
PN21578	**DTSSP** (3,3'-Dithiobis[sulfosuccinimidyl propionate])	50mg

EDC, Thermo Scientific Pierce

Thermo SCIENTIFIC NEW PN



EDC
M.W. 191.70

Water soluble carbodiimide for rapid preparation of peptide conjugates. 1-Ethyl-3-[3-dimethylaminopropyl] carbodiimide hydrochloride (EDC or EDAC) is a zero-length crosslinker for coupling carboxyl groups to primary amines.

- Zero-length crosslinker
- Amide bond formed provides a neutral linkage, which is ideal for preparing peptides and antigens
- Adding Sulfo-NHS (**PN24510**) enhances the coupling reaction at physiological pH values
- Reactive group: carbodiimide
- Reactive toward: amino and carboxyl groups

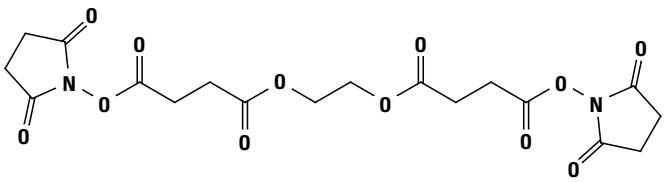
Applications

- Conjugate carboxyl to amine groups in peptides and proteins
- Convert carboxyls to amine-reactive Sulfo-NHS esters
- Crosslink proteins to carboxyl-coated beads or surfaces
- Activate nanoparticles with amine-reactive Sulfo-NHS esters
- Couple haptens to carrier proteins (e.g., attach a peptide to KLH)
- DNA labelling through 5' phosphate groups

Catalogue No	Description	Quantity
PN77149	**EDC** (1-Ethyl-3-[3-dimethylaminopropyl] carbodiimide hydrochloride)	10mg
PN22980	**EDC** 1-Ethyl-3-[3-dimethylaminopropyl] carbodiimide hydrochloride	5g
PN22981	**EDC**	25g

EGS, Thermo Scientific Pierce

Thermo SCIENTIFIC NEW PN



EGS
M.W. 456.36
Spacer Arm 16.1 Å

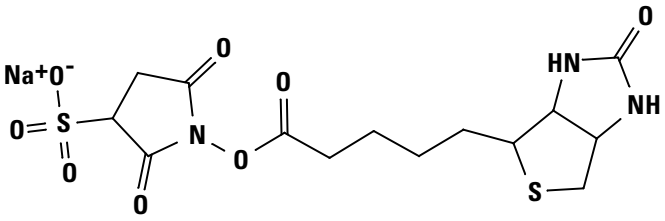
Long spacer arm and cleavable under gentle conditions.

- Cleavable at pH8.5 using Hydroxylamine for 3hr to 6hr at 37°C
- Lactose dehydrogenase retained 60% of its activity after reversible crosslinking with EGS
- Reactive groups: NHS esters (homobifunctional)
- Reactive toward: amino groups

Catalogue No	Description	Quantity
PN21565	**EGS** (Ethylene glycol bis[succinimidylsuccinate])	1g

Sulfo-NHS-Biotin, Thermo Scientific Pierce

Thermo SCIENTIFIC NEW PN



Sulfo-NHS-Biotin
M.W. 443.43
Spacer Arm 13.5 Å

Water-soluble analogue of NHS-Biotin.

- Shorter spacer arm than Sulfo-NHS-LC-Biotin
- Reacts with primary amines at pH7 to pH9 in non-amine containing buffers such as borate, carbonate or phosphate buffers
- Negative charge of -SO_3 keeps biotinylation localised at the cell surface so reagent does not pass through cell membrane
- Water solubility eliminates the need for harmful organic solvents

Catalogue No	Description	Quantity
PN21217	**Sulfo-NHS-Biotin**	100mg
PN21326	**Sulfo-NHS-Biotin, no-weigh format**	8 x 2mg