



Interbiotech - BioScience Innovations

H10E

## Succinimidyl-ester diazirine (SDA) reagents

succinimidyl-ester diazirine (SDA) reagents are a new class of crosslinkers that combine proven amine-reactive chemistry with an innovative and efficient diazirine-based photochemistry for conjugating amine-containing molecules to nearly any other functional group. The SDA crosslinkers include six compounds differing in spacer arm lengths, their ability to cleave the crosslinked proteins, and the presence or absence of a charged group for differential membrane permeability. SDA reagents extend the efficiency and range of interactions that can be explored by standard protein crosslinking techniques used to understand **protein structure** and to stabilize **protein-protein interactions**.

### Benefits :

- **Heterobifunctional** – succinimide ester group reacts with primary amines at pH 7-9 to form covalent amide bonds; diazirine (azipentanoate) group reacts efficiently with any amino acid side chain or peptide backbone upon activation with long-wave UV light (330-370 nm)
- **Controllable** – two-step chemical crosslinking is activated using common laboratory UV lamps
- **Easy to use** – these crosslinkers are photo-stable under typical laboratory lighting conditions so there is no need to perform experiments in the dark
- **Better than aryl azides** – the diazirine photoreactive group has better photostability in normal light than phenyl azide groups of traditional photoreactive crosslinkers, yet the diazirine group is more efficiently activated by long-wave UV light
- **Versatile** – six different derivatives for specific experimental needs:  
**Short** (3.9 Å) and **long** (12.5 Å) spacer arm varieties  
**Membrane-permeable** (NHS) and **impermeable** (Sulfo-NHS) varieties  
**Non-cleavable** and **cleavable** (disulfide spacer) varieties

To order:

membrane permeable for intracellular crosslinking (NHS Ester)	membrane impermeable for cell surface crosslinking (Sulfo-NHS Ester)
<b>NHS-Diazirine(SDA) DW8531, 50mg</b> Succinimidyl 4,4'-azipentanoate MW:225.20 spacer: 3.9A	<b>Sulfo-NHS-Diazirine (Sulfo-SDA) DW8561, 50mg</b> Sulfosuccinimidyl 4,4'-azipentanoate MW:327.3 spacer: 3.9A
<b>LC-SDA (NHS-LC-Diazirine) DW8541, 50mg</b> Succinimidyl 6-(4,4'-azipentanamido)hexanoate MW:338.4 spacer: 12.5A	<b>Sulfo-NHS-LC-Diazirine (Sulfo-LC-SDA) DW8571, 50mg</b> Sulfosuccinimidyl 6-(4,4'-azipentanamido)hexanoate MW:440.4 spacer: 12.5A
<b>NHS-SS-Diazirine (SDAD) DW8551, 50mg</b> Succinimidyl 2-([4,4'-azipentanamido]ethyl)-1,3'-dithiopropionate MW:388.5 spacer: 13.6A	<b>Sulfo-NHS-SS-Diazirine (Sulfo-SDAD) DW8581, 50mg</b> Sulfosuccinimidyl 2-([4,4'-azipentanamido]ethyl)-1,3'-dithiopropionate MW:490.51 spacer: 13.6A

## Related products lines

Interbiotec - BioSciences innovation – proposes a complete range of products for protein biochemistry.

[Products HighLights Overview](#), including:

[Remarkable conjugation tools](#): PEO crosslinkers (hydrophilic spacers), Hydrazone chemistry (flexible method using stable activation step), Click Chemistry & Staudinger ligation (versatile and mild conjugation), Multifunctional crosslinkers, Boronic acid (modifying saccharides)

[FluoProbes labeling agents](#) (superior fluorescent dyes)

[Desalting tools](#) – CelluSep tubings, SpectraPor tubings, GebaFlex, FloatALyser, SlideALyser,...

Ask for UV Lamps for crosslinking

Other crosslinkers (i.e. Sulfo-SANPAH, BS3, ...)

Photoreactive Amino Acids

Label Transfer Reagents

### Information inquire

Reply by Fax : +33 (0) 4 70 03 82 60 or email at [interbiotech@interchim.com](mailto:interbiotech@interchim.com)

☐ I wish to recieve the complete documentation about: \_\_\_\_\_

Name: \_\_\_\_\_ 2<sup>nd</sup> name: \_\_\_\_\_ Position: \_\_\_\_\_

Company/Institute: \_\_\_\_\_ Service, Lab: \_\_\_\_\_

Adress: \_\_\_\_\_

Zip code: \_\_\_\_\_ Town: \_\_\_\_\_

Tel \_\_\_\_\_ Fax \_\_\_\_\_ Email: \_\_\_\_\_