

# Streptavidin Conjugation Kit - Lightning-Link® ab102921

[39 References](#) [4 Images](#)

### Overview

#### Product name

Streptavidin Conjugation Kit - Lightning-Link®

#### Product overview

Streptavidin Conjugation Kit / Streptavidin Labeling Kit ab102921 uses a simple and quick process for streptavidin labeling / conjugation of antibodies. It can also be used to conjugate other proteins or peptides. Learn about our [antibody labeling kits and their advantages](#).

To conjugate an antibody to Streptavidin using this kit:

- add modifier to antibody and incubate for 3 hrs
- add quencher and incubate for 30 mins

The conjugated antibody can be used immediately in WB, ELISA, IHC etc. No further purification is required and 100% of the antibody is recovered for use.

Learn about buffer compatibility below; for incompatible buffers and low antibody concentrations, use our rapid [antibody purification and concentration kits](#). Use the [FAQ](#) to learn more about the technology, or about conjugating other proteins and peptides to Streptavidin.

Custom size conjugation kits up to 100 mg are available on demand. Please contact us to discuss your requirements.

#### Notes

This product is manufactured by Expedeon, an Abcam company, and was previously called Lightning-Link® Streptavidin Labeling Kit. 708-0005 is the same as the 100 µg size. 708-0010 is the same as the 3 x 100 µg size. 708-0030 is the same as the 3 x 10 µg size. 708-0015 is the same as the 1 mg size.

#### Amount and volume of antibody for conjugation to Streptavidin

<i>Kit size</i>	<i>Recommended maximum amount of antibody</i>	<i>Maximum antibody volume<sup>1</sup></i>
3 x 10 µg	3 x 10 µg	3 x 10 µL
100 µg	100 µg	100 µL
3 x 100 µg	3 x 100 µg	3 x 100 µL

1 x 1 mg	1 x 1 mg	1 x 1 mL
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<sup>1</sup> Ideal antibody concentration is 1mg/ml. 0.5 - 1 mg/ml can be used if the maximum antibody volume is not exceeded. Antibodies > 5mg/ml or < 0.5 mg/ml should be diluted /concentrated.

### Buffer Requirements for Conjugation

Buffer should be pH 6.5-8.5.

#### Compatible buffer constituents

If a concentration is shown, then the constituent should be no more than the concentration shown. If several constituents are close to the limit of acceptable concentration, then this can inhibit conjugation.

50mM / 0.6% Tris <sup>1</sup>	0.1% BSA	50% glycerol
0.1% sodium azide	PBS	Potassium phosphate
Sodium chloride	HEPES	Sucrose
Sodium citrate	EDTA	Trehalose

<sup>1</sup> Tris buffered saline is almost always ≤ 50 mM / 0.6%

#### Incompatible buffer constituents

Thiomerosal	Proclin	Glycine
Arginine	Glutathione	DTT

If a constituent of the buffer containing your antibody or protein is not listed above, please check the [FAQ](#) or [contact us](#).

Only purified antibodies are suitable for use, ie. where other proteins, peptides, or amino acids are not present: antibodies in ascites fluid, serum or hybridoma culture are not suitable for conjugation.

### Storing and handling conjugation kits

Lyophilized Lightning-Link<sup>®</sup> components are hygroscopic.

Kits are intentionally shipped at ambient temperature with silica gel to avoid exposure to moisture. Upon receipt, store the kit frozen and protect from moisture. Before opening the outer container, allow the lyophilized components to reach room temperature to minimize condensation.

## Properties

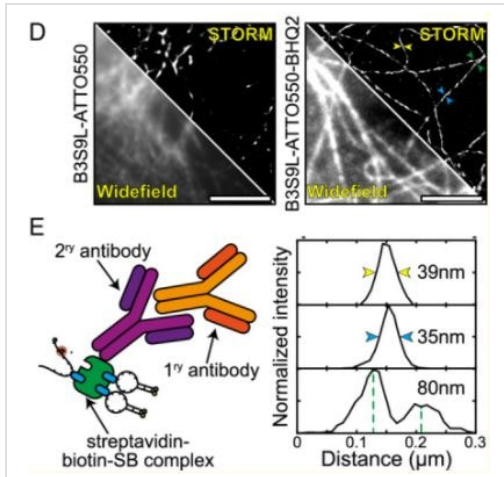
### Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 mg	100 µg	3 x 10 µg	3 x 100 µg
Modifier reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl
Quencher reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl

Components	1 mg	100 µg	3 x 10 µg	3 x 100 µg
ab274136 - Streptavidin mix	1 x 1mg	1 x 100µg	3 x 10µg	3 x 100µg

## Images



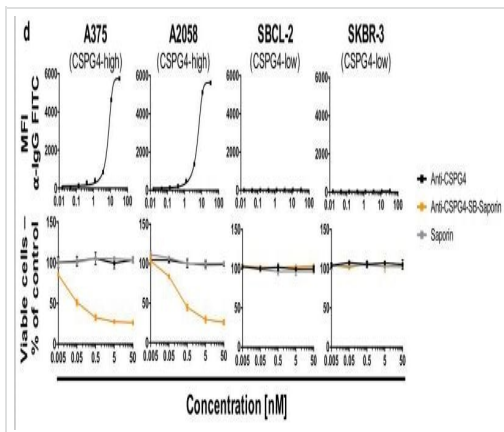
Conjugation - Streptavidin Conjugation Kit -

Lightning-Link® (ab102921)

Image from Pereira et al., *Traffic*, 21(5):375-385; doi: 10.1111/tra.12728. Reproduced under the Creative Commons license <https://creativecommons.org/licenses/by/4.0/>

Pereira, Pedro M., et al used Streptavidin Conjugation Kit - Lightning-Link® (ab102921) as part of examining super-resolution fluorescent probes for Single-molecule localization microscopy. They used the kit to conjugate Streptavidin to anti-mouse secondary antibody for use in fixed-cell imaging.

D, Pre-acquisition snapshot (WF) and SMLM reconstruction (STORM) of  $\beta$ -tubulin immunolabelling with B3S9L SB (B3S9L-ATTO555-BHQ2) and control probe (B3S9L-ATTO555). Scale bars are 5 µm. E, Schematic representation of the strategy used to perform  $\beta$ -tubulin immunolabelling (left), measurement of Full Width Half Maximum (FWHM) and distances between structures on the highlighted regions in D

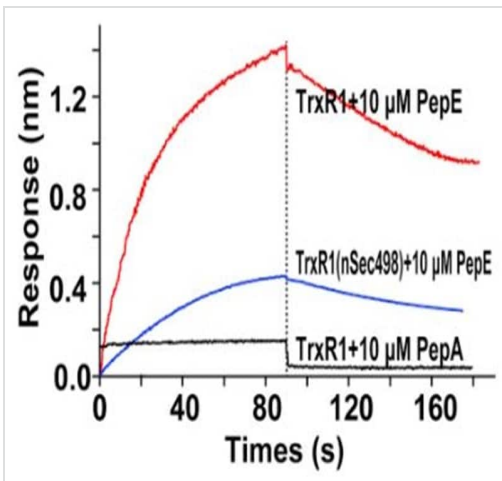


Conjugation - Streptavidin Conjugation Kit -

Lightning-Link® (ab102921)

Image from Hoffmann et al., *Sci Rep.*, 10(1):8869; doi: 10.1038/s41598-020-65860-x. Reproduced under the Creative Commons license <https://creativecommons.org/licenses/by/4.0/>

Hoffmann, Ricarda M., et al used Streptavidin Conjugation Kit - Lightning-Link® (ab102921) as part of examining development of anticancer Antibody-Drug Conjugates. They used the kit to conjugate Streptavidin to Trastuzumab and trastuzumab emtansine antibodies for use in streptavidin-biotin based assay. Investigation of cell viability upon treatment with the naked antibody (black), antibody-Streptavidin-Biotin-Saporin conjugate (orange) or Saporin alone (grey). The ribosome inhibitor Saporin, unable to enter the cell alone, can be used to investigate antibody internalization by measuring viability (MTS) of antibody-SB-Saporin conjugate-treated cells.

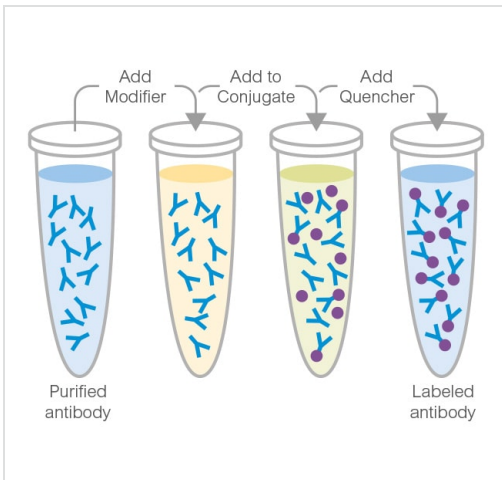


Wang, Xinzhi et al used Streptavidin Conjugation Kit - Lightning-Link® (ab102921) as part of examining. They used the kit to conjugate Streptavidin to recombinant proteins for use in bio-layer interferometry.

Comparison of the binding activity between PepE and TrxR1 protein (red line), PepE and TrxR1 nSec498 protein (blue line), and PepA and TrxR1 protein (black line) through BLI analysis.

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Image from Wang et al., Redox Biol. 24:101153; doi: 10.1016/j.redox.2019.101153. Reproduced under the Creative Commons license <https://creativecommons.org/licenses/by/4.0/>



Streptavidin Conjugation Kit

This illustration demonstrates a general procedure and will slightly vary dependent on the conjugate used.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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