

# DyLight® 680 Conjugation Kit (Fast) - Lightning-Link® ab201804

[4 References](#) [2 Images](#)

### Overview

**Product name** DyLight® 680 Conjugation Kit (Fast) - Lightning-Link®

**Product overview** DyLight® 680 Conjugation Kit / DyLight® 680 Labeling Kit ab201804 uses a simple and quick process for DyLight® 680 labeling / conjugation of antibodies. It can also be used to conjugate other proteins or peptides. Learn about our [antibody labeling kits and their advantages](#).

This product is manufactured by Expedeon, an Abcam company. See the table below to match Abcam kit size against Expedeon product code.

To conjugate an antibody to DyLight® 680 using this kit:

- add modifier to antibody and incubate for 15 mins
- add quencher and incubate for 5 mins

The DyLight® 680 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 DyLight® 680.

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® Rapid DyLight® 680 Labeling Kit. 327-0005 is the same as the 100 µg size. 327-0030 is the same as the 3 x 10 µg size. 327-0010 is the same as the 3 x 100 µg size. 327-0015 is the same as the 1 mg size.

#### Amount and volume of antibody for conjugation to DyLight® 680

<i>Kit size</i>	<i>Recommended amount of antibody<sup>1</sup></i>	<i>Maximum amount of antibody</i>	<i>Maximum antibody volume<sup>2</sup></i>
3 x 10 µg	3 x 10 µg	3 x 20 µg	3 x 10 µL
100 µg	1 x 100 µg	1 x 200 µg	1 x 100µL

3 x 100 µg	3 x 100 µg	3 x 200 µg	3 x 100 µL
1 mg	1 x 1 mg	1 x 2 mg	1 x 1 mL

<sup>1</sup> Using the maximum amount of antibody may result in less labelling per antibody.

<sup>2</sup> Ideal antibody concentration is 1mg/ml. 0.5 - 1 mg/ml can be used if the maximum antibody volume is not exceeded. Antibodies > 2 mg/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 <sup>2</sup>	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%

<sup>2</sup> BSA can also interfere with the use of the conjugated antibody in tissue staining.

#### **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 media are incompatible.

#### **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.

DyLight<sup>®</sup> is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries.

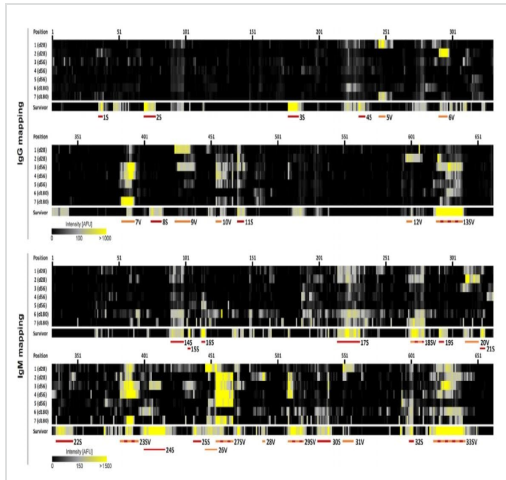
## Properties

### Storage instructions

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

Components	1 mg	100 µg	3 x 10 µg	3 x 100 µg
ab274028 - Dylight® 680 Conjugation Mix	1 x 1mg	1 x 100µg	3 x 10µg	3 x 100µg
ab273994 - Modifier reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl
ab273995 - Quencher reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl

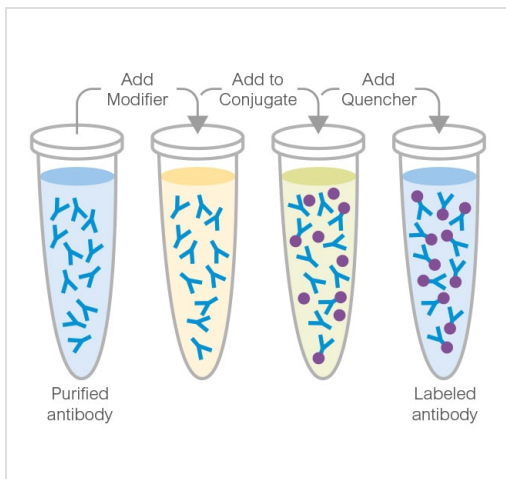
## Images



Flow Cytometry - DyLight® 680 Conjugation Kit  
(Fast) Lightning-Link; (ab201804)

Image from Heidepriem, Jasmin, et al. *Biotechnol J.*, 15(9): e2000069. doi: 10.1002/biot.202000069.  
Reproduced under the Creative Commons license  
<https://creativecommons.org/licenses/by/4.0/>

Heidepriem, Jasmin, et al used DyLight® 680 Conjugation Kit (Fast) - Lightning-Link® (ab201804) as part of examining the Ebola virus (EBOV). They used the kit to conjugate DyLight™ 680 to anti-HA-peptide antibody for use in peptide microarray. Peptide microarray displaying fluorescence from secondary antibodies as a heat map (top: IgG response, bottom: IgM response). The EBOV surface glycoprotein (GP) (676 AA) was mapped as 662 spots of 15-mer peptides with a lateral shift of one AA. Sera from seven recombinant vesicular stomatitisvirus-Zaire ebolavirus-GP (rVSV-ZEBOV-GP) vaccines (numbered) and one EVD survivor were analyzed on separate microarrays. The vaccines are listed with the day of serum collection after vaccination. The defined epitopes are named by their origin from vaccines (V, in orange), survivor (S, in red) or both (SV, in orange and red)



Conjugation - DyLight® 680 Conjugation Kit  
(ab201804)

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"

## **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors