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Product datasheet

# Cy3® Conjugation Kit (Fast) - Lightning-Link® ab188287

18 References 5 Images

## Overview

**Product name**

Cy3® Conjugation Kit (Fast) - Lightning-Link®

**Product overview**

Cy3 Conjugation Kit / Cy3 Labeling Kit ab188287 uses a simple and quick process for Cy3 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 Cy3 using this kit:
- add modifier to antibody and incubate for 15 mins
- add quencher and incubate for 5 mins
The Cy3 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.

The excitation and emmision wavelengths for Cy3® are Ex: 552nm, Em: 565nm.

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 Cy3.

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 Cy3 Labeling Kit. 340-0005 is the same as the 100 µg size. 340-0010 is the same as the 3 x 100 ug size. 340-0030 is the same as the 3 x 10 ug size. 340-0015 is the same as the 1 mg size.

**Amount and volume of antibody for conjugation to Cy3**

| *Kit size* | *Recommended amount of antibody*[1] | *Maximum amount of antibody* | *Maximum antibody volume*[2] |
|---|---|---|---|
| 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 100 µL |

| | | | |
|---|---|---|---|
| 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 |

[1] Using the maximum amount of antibody may result in less labelling per antibody.

[2] Ideal antibody concentration is 1mg/ml. 0.5 - 1 mg/ml can be used if the maximum antibody volume is not exceeded. Antibodies > 2mg/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[1] | 0.1% BSA[2] | 50% glycerol |
|---|---|---|
| 0.1% sodium azide | PBS | Potassium phosphate |
| Sodium chloride | HEPES | Sucrose |
| Sodium citrate | EDTA | Trehalose |

[1] Tris buffered saline is almost always ≤ 50 mM / 0.6%

[2] 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® components are hygroscopic.

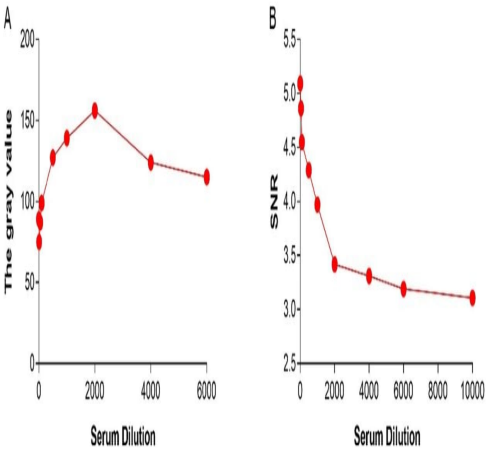
Kits are intentionally shipped at ambient temperature with silica gel to avoid exposure to moisture. Upon receipt, store the kit frozen and protect from moisture. Before opening the outer container, allow the lyophilized components to reach room temperature to minimize condensation.

## Properties

| | |
|---|---|
| **Storage instructions** | Store at -20°C. Please refer to protocols. |

| Components | 1 mg | 100 µg | 3 x 10 µg | 3 x 100 µg |
|---|---|---|---|---|
| ab274055 - Cyanine Dye3 | 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 |

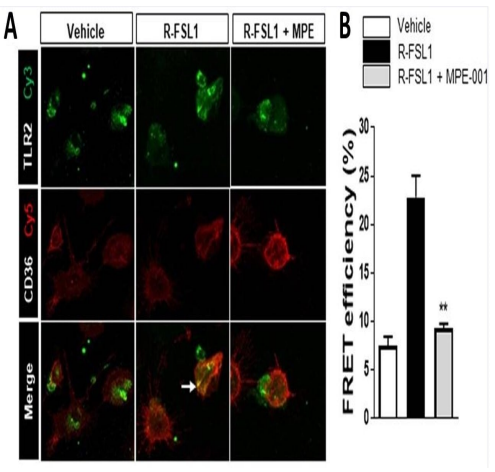
## Images




Conjugation - Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287)



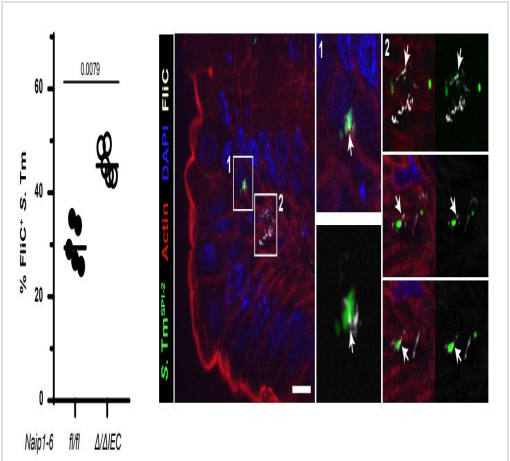
Wu, Yue et al used Cy3® Conjugation Kit - Lightning-Link® (ab188287) as part of examining porcine parvovirus (PPV). They used the kit to conjugate Cy3® to standard PPV positive antibody for use in protein chip.
Optimization of the serum dilution. A 2000-fold dilution of serum was determined as a diagnostic concentration of the visible protein chip detection microarray




FRET - Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287)



Mellal, Katia, et al used Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287) as part of examining effects of MPE-001 on the CD36/TLR2 interaction. They used the kit to conjugate Cy3® to anti-TLR2 antibody for use in FRET.
Peritoneal MPs were stimulated with 300 ng/ml R-FSL1 in the presence of 10-7M MPE-001 or vehicle. (A) MPE-001 disrupted the interaction between CD36 labeled with Cy5 (red) using the Cy5® Conjugation Kit (Fast) - Lightning-Link® (**ab188288**) and TLR2 labeled with Cy3® (green) using the Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287) as assessed by FRET after 5 min stimulation with R-FSL1. (B) Percentage of energy transfer measured using LSM-700 confocal microscope (Zeiss). One-way ANOVA test with Newman-Keuls post-test for multiple comparison was performed. *P<0.05, **P<0.01 and ***P<0.001 vs R-FSL1. Data are shown as mean ±S.E.M.

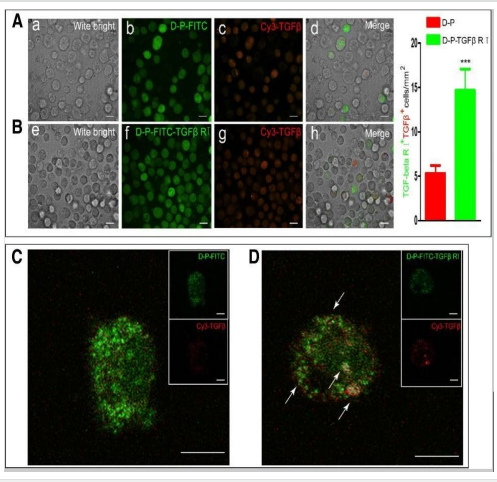



Immunohistochemistry - Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287)



Hausmann, Annika, et al used Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287) as part of examining flagella expression in mice orally infected with Salmonella Typhimurium (S. Tm). They used the kit to conjugate Cy3® to anti-FliC antibody for use in immunohistochemistry.

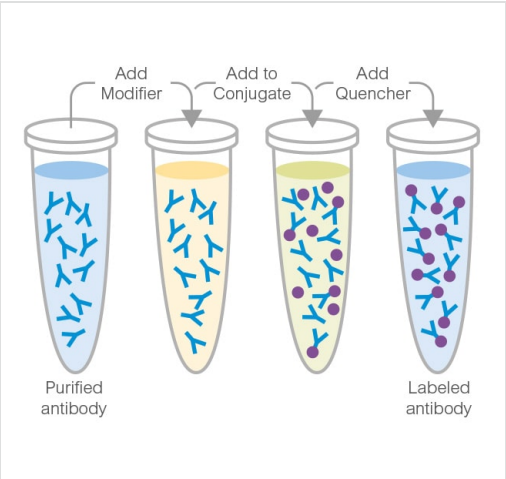
Intestinal epithelial cell (IEC)-specific deletion of NAIP1-6 (Naip1-6/IEC; open circles; ntotal S. Tm=776) leads to an increase of flagellated S. Tm at 12 hpi within the cecal mucosa (Naip1-6fl/fl; circles; ntotal S. Tm=238). Quantifications are based on immunofluorescence staining for the flagella subunit FliC. Black bar, median. Statistical analysis, Mann-Whitney-U Test, p-value indicated. Scale bar, 10 µm.




Fluorescence Microscopy - Cy3 Conjugation Kit (Fast)- Lightning-Link(ab188287)



Zhang, Fei, Yuan Xie, and Yuhao Bian used Cy3® Conjugation Kit (Fast) - Lightning-Link® (ab188287) as part of examining cardiomyogenic differentiation of adipose-derived stem cells. They used the kit to conjugate TGF-β1 protein to Cy3® for use in confocal microscopy. Confocal microscopy was performed to analyze (A, B) TGF-1 binding to rTGF-1 RI on ADSC cell membranes and to visualize (C, D) the colocalization of rTGF-β1 RI (DMPE-PEG-TGF-β1 RI-FITC) and TGF-1 (Cy3-TGF-1) on the surface of ADSCs at 64 oil immersion (scale bar, 100 µm; *p<0.05, **p<0.01, ***p<0.001)

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