**Product datasheet**

**FITC Conjugation Kit (Fast) - Lightning-Link® ab188285**

**Overview**

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

**Product overview**  
FITC Conjugation Kit / FITC Labeling Kit (Fast) (ab188285) uses a simple and quick process for FITC / Fluorescein 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 FITC / Fluorescein using this kit:
- add modifier to antibody and incubate for 15 mins
- add quencher and incubate for 5 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 FITC.

**Notes**

This product is manufactured by Expedeon, an Abcam company, and was previously called Lightning-Link® Rapid Fluorescein Labeling Kit. 310-0005 is the same as the 100 µg size. 310-0010 is the same as the 3 x 100 µg size. 310-0030 is the same as the 3 x 10 µg size. 310-0015 is the same as the 1 mg size.

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

<table>
<thead>
<tr>
<th>Kit size</th>
<th>Recommended</th>
<th>Maximum</th>
<th>Maximum antibody volume³</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 10 µg</td>
<td>3 x 10 µg</td>
<td>3 x 20 µg</td>
<td>3 x 10 µL</td>
</tr>
<tr>
<td>100 µg</td>
<td>1 x 100 µg</td>
<td>1 x 200 µg</td>
<td>1 x 100 µL</td>
</tr>
<tr>
<td>3 x 100 µg</td>
<td>3 x 100 µg</td>
<td>3 x 200 µg</td>
<td>3 x 100 µL</td>
</tr>
<tr>
<td>1 mg</td>
<td>1 x 1 mg</td>
<td>1 x 2 mg</td>
<td>1 x 1 mL</td>
</tr>
</tbody>
</table>

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 > 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.
several constituents are close to the limit of acceptable concentration, then this can inhibit conjugation.

50mM / 0.6% Tris\(^1\) 0.1% BSA 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**

Thiomersal 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.

### Tested applications

**Suitable for:** Conjugation

### Properties

#### Storage instructions

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

<table>
<thead>
<tr>
<th>Components</th>
<th>1 mg</th>
<th>100 µg</th>
<th>3 x 10 µg</th>
<th>3 x 100 µg</th>
<th>300 µg</th>
<th>30 µg</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC Mix</td>
<td>1 vial</td>
<td>1 vial</td>
<td>3 vials</td>
<td>3 vials</td>
<td>3 vials</td>
<td>3 vials</td>
</tr>
<tr>
<td>Fluorescein Modifier reagent</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>Fluorescein Quencher reagent</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
</tbody>
</table>

### Applications

Our [Abpromise guarantee](#) covers the use of ab188285 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjugation</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

### Images
Lydon et al. used ab188285 FITC Conjugation Kit to label mouse anti-sheep CD34 antibody with FITC.

Data shows a) Representative light-scatter (SSC-A) vs fluorescence (CD34-FITC) plot of CD34 expression on cells from ovine apheresis samples using two-colour flow cytometry. B) IgG control.

FITC Conjugation Kit labeling anti MUC1 SP antibodies FACS

Image from Kovjazin R et al., PLoS One, 9(1):e85400. Fig 3.; doi: 10.1371/journal.pone.0085400. Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/.
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