Product datasheet

PE / R-Phycoerythrin Conjugation Kit ab102918

Overview

Product name
- PE / R-Phycoerythrin Conjugation Kit

Product overview
- R-PE Conjugation Kit ab102918 uses a simple and quick process to conjugate an antibody to R-PE. It can also be used to conjugate other proteins or peptides.

- To conjugate an antibody to R-PE 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 R-PE.

Notes

Amount and volume of antibody for conjugation to R-PE

<table>
<thead>
<tr>
<th>Kit size</th>
<th>Recommended amount of antibody</th>
<th>Maximum antibody volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 µg</td>
<td>3 x 10 µg</td>
<td>3 x 10 µL</td>
</tr>
<tr>
<td>60 µg</td>
<td>60 µg</td>
<td>60 µL</td>
</tr>
<tr>
<td>180 µg</td>
<td>3 x 60 µg</td>
<td>3 x 60 µL</td>
</tr>
<tr>
<td>600 µg</td>
<td>600 µg</td>
<td>600 µL</td>
</tr>
</tbody>
</table>

- The selling size of this product is now based on the amount of antibody that can be conjugated with the kit; the amount of antibody advised that can be used with the kit has also been updated to reflect what will give the best conjugation results. The quantity and formulation of reagents provided have not changed, if you have been previously using the kit successfully with a different amount of antibody, there is no need to change the way that you are using the kit.

1 Kit is designed to give a 1:1 molar ratio of antibody to PE after conjugation.

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

50 mM / 0.6% Tris
0.1% sodium azide
PBS
Potassium phosphate
Sodium chloride
HEPES
Sucrose
Sodium citrate
EDTA
Trehalose

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

**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.

**Properties**

**Storage instructions**

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

<table>
<thead>
<tr>
<th>Components</th>
<th>30 µg</th>
<th>60 µg</th>
<th>180 µg</th>
<th>600 µg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modifier reagent</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>Quencher reagent</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>R-PE mix</td>
<td>3 x 10µg</td>
<td>1 x 100µg</td>
<td>3 x 100µg</td>
<td>1 x 1mg</td>
</tr>
</tbody>
</table>

**Images**

Conjugation - R-Phycoerythrin Conjugation (ab102918)
RA Bagchi et al. used PE conjugation kit / PE labeling kit ab102918 as part of examining the conversion of fibroblasts to myofibroblasts. They used the PE labeling kit to conjugate phycoerythrin to a DDR2 antibody for use in flow cytometry.

Charts are forward-scatter plots illustrating flow cytometry analysis of cardiac cells from WT and scleraxis KO mice. Left column, unstained cells; center column, stained cells from WT tissue; right column, stained cells from scleraxis KO tissue. Results are representative of assessments from n = 3 independent tissue samples. Purple outline denotes labeled cells, and is derived from unstained plots.

Flow cytometry histogram showing integrin beta-3 positive population of platelets from wildtype and knockout mice. Integrin beta-3 antibody was conjugated using EasyLink R-Phycocerythrin conjugation kit (ab102918). Flow cytometry was performed using platelets from wild type and integrin beta-3 knockout mice. Mice that expressed beta-3 (shown in red) had a clear shift in FL-2 fluorescence over beta-3 knockout mice (shown in black).

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