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# ab270053 SimpleStep ELISA® Peptide Check Kit

A product of Expedeon, an  
Abcam company

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SimpleStep ELISA® Peptide Check Kit:

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This kit has been developed exclusively for the SimpleStep ELISA® Custom ELISA Kit (ab270552) and SimpleStep ELISA® Capture Peptide Conjugation Kit (ab270690).

This product is for research use only and is not intended for diagnostic use.

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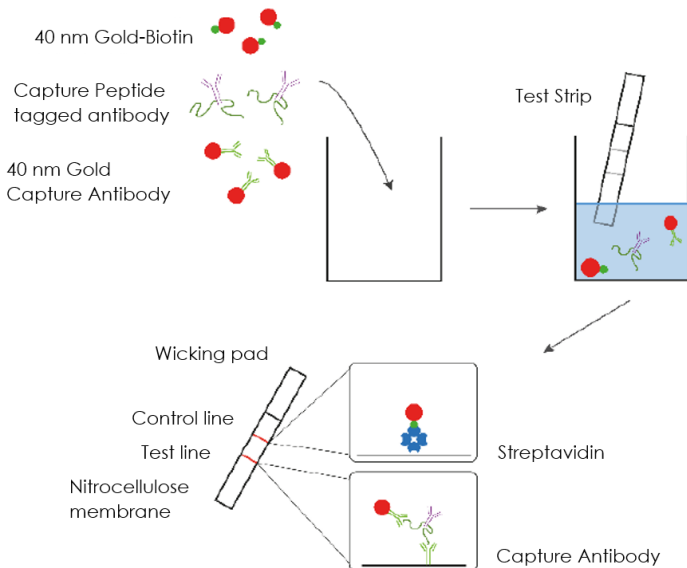
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# 1. Overview

SimpleStep ELISA® Peptide Check Kit (ab270053) is a quick and simple immunochromatography test that allows you to confirm the successful conjugation of multiple Capture Peptides to your desired antibody without any specialized or costly equipment.

The key component of the kit is a nitrocellulose membrane “half strip” containing a ‘Test line’ of immobilized Capture Antibody and a ‘Control line’ of immobilized Streptavidin. The test strips also contain an absorbent pad to promote and control the sample flow through the nitrocellulose. The Capture Peptide tagged antibody is run on the nitrocellulose membrane together with Gold conjugated Capture Antibody and Gold conjugated Biotin as the detection labels. The biotin binds to streptavidin and the Capture Antibody binds the Capture Peptide with exceptionally high affinity and specificity. When the gold conjugated Biotin is bound by streptavidin on the C-line and the Peptide tagged antibody is bound by both the antibody on the T-line and Gold conjugated Antibody, two visible red lines appear on the strip.

SimpleStep ELISA® Peptide Check Kit (ab270053) is suitable to use with SimpleStep ELISA® Capture Peptide Conjugation Kit.



## 2. Materials Supplied and Storage

Store Peptide test strips at +4°C. Store all other components at -20°C immediately on receipt. Kit can be stored for 1 year from receipt, if components have not been reconstituted.

Avoid repeated freeze-thaws of reagents.

Item	30 tests	Storage temperature
10X Running Buffer	2 vials	-20°C
Capture Peptide test strips	30 Strips	+4°C
10X Gold Conjugate Mix containing: <ul style="list-style-type: none"><li>• Gold conjugated Capture Antibody</li><li>• Gold conjugated Biotin</li></ul>	1 vial	-20°C

**Not supplied:** 96-wells low binding plate, Bovine serum albumin (BSA)

### 3. Assay Procedure

- Equilibrate all materials and prepared reagents to room temperature just prior to use and gently agitate.
  
- 3.1** Dilute the 10x Running Buffer with distilled water and add BSA to make 1x Running Buffer + 0.1% BSA.
  
- 3.2** Reconstitute the 10x Gold Conjugate Mix with 100  $\mu\text{l}$  of 1x Running Buffer + 0.1% BSA.
  
- 3.3** Dilute the 10x Gold Conjugate Mix 1:10 in 1x Running Buffer + 0.1% BSA; you will need 20  $\mu\text{l}$  of 1:10 diluted Mix for each sample.
  
- 3.4** Dilute the Peptide tagged antibody sample to within dynamic range. The optimal conjugate concentration range is 0.1–1  $\mu\text{g}/\text{mL}$ . It is recommended to run the samples in duplicate.
  
- 3.5** For a single test, mix 20  $\mu\text{L}$  of diluted Peptide tagged antibody and 20  $\mu\text{L}$  of 1x Conjugate Mix and mix well through pipetting.
  
- 3.6** Load 30  $\mu\text{L}/\text{well}$  of your mix in a 96-well low binding plate or a suitable container
  
- 3.7** Insert the strip in the well.
  
- 3.8** Run for 10 minutes.
  
- 3.9** Check the result by eye. Two red lines will become visible if the conjugation was successful. If only the Control line becomes visible but not the Test line, the conjugation has failed and should be repeated. If the Control line does not appear the assay should be repeated.

## 4. Notes



## Technical Support

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