**Product Datasheet**

**Lightning-Link (R) HRP Antibody Labeling Kit**

**701-0003**

Unit Size: 5 x 1mg Reaction

Store at -20C.

Reviews: 4  Publications: 81

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Updated 7/23/2023 v.20.1

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## Product Information

<table>
<thead>
<tr>
<th><strong>Unit Size</strong></th>
<th>5 x 1mg Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>Concentration is not relevant for this product. Please see the protocols for proper use of this product.</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at -20°C.</td>
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<tr>
<td><strong>Conjugate</strong></td>
<td>HRP</td>
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## Product Description

**Description**

Lightning-Link antibody labeling kits enable the direct labeling of antibodies, proteins, peptides or other biomolecules for use in R&D applications, drug discovery and the development of diagnostic kits (See protocol for further information).

Our HRP antibody labeling kit enables the direct conjugation of Horseradish Peroxidase to any biomolecule with an available amine group. The researcher simply pipettes their antibody or other biomolecule into the vial of Lightning-Link HRP and incubates for 3 hours.

### Features

- Quick and easy to use
- Save time, no special knowledge required
- No separation steps
- 100% recovery - no antibody/protein loss
- Can be used in a wide range of applications
- Flexible
- Freeze dried
- Ships at ambient temperature, long shelf-life
- Fully scalable (10 ug to 1 g or more)
- Easy transfer from R&D to manufacturing
- Stringently QC tested
- Consistent high quality, excellent batch-to-batch reproducibility
- Large number of labels available
- Experimental flexibility
- Reliable: nearly 300 references
- Successfully used in many fields of research

Horseradish peroxidase is a 44kDa glycoprotein with 6 lysine residues. The enzyme label can be visualized by chromogenic reactions; for example diaminobenzidine (DAB) in the presence of hydrogen peroxide (H2O2) is converted into a water insoluble brown pigment. Other substrates which can be used to measure horseradish peroxidase activity include ABTS, TMB and TMBUS.

Learn more about Lightning-Link™ Conjugation Kits by reading FAQs

For more information please check out these useful links!

- Antibody Labeling Guide
- Antibody Conjugation Illustrated Assay

## Kit Components

- 1 or 3 or 5 glass vial(s) of Lightning-Link mix
- 1 vial of LL-Modifier reagent
- 1 vial of LL-Quencher reagent

## Notes

This product is manufactured by Abcam and distributed by Novus Biologicals.

This product is for research use only and is not approved for use in humans or in clinical diagnosis. This product is guaranteed for 1 year from date of receipt and this statement overrides any mentioned guarantee period on the limitations section of this products datasheet. Please contact technical@novusbio.com with questions.

## Product Application Details

**Applications**

- Western Blot
- Immunohistochemistry
- Immunohistochemistry-Paraffin
<table>
<thead>
<tr>
<th>Recommended Dilutions</th>
<th>Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Notes</strong></td>
<td>By circumventing the desalting or dialysis steps that commonly interrupt traditional antibody conjugation procedures, LightningLink technology can be used to label both small (e.g. 10 ug) and large quantities of primary antibodies with ease. Batch-to-batch variation upon scale up is minimal as the process is so simple, and recoveries are always 100%. This kit is supplied with 5 vials, each suitable for labeling up to 4 mg of antibody.</td>
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</tbody>
</table>
Images

Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0003]

Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0003]

Lightning-Link® Comparative Data

Coomassie stained recombinant CD20 protein from E.coli, visualized with fast developer.

Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0003] - Brown= CD20 labeled with HRP, Red= CD3 labeled with alkaline phosphatase. Mouse anti-human CD20 was conjugated to HRP using Lightning-Link® kits, and rat anti-human CD3 was conjugated to Alkaline Phosphatase using Lightning Link®. Both antibodies were then used simultaneously to stain formalin fixed paraffin fixed embedded sections of human lymph node. CD20 positive cells are visualized with DAB and are stained brown, and CD3 visualized with Fast Red and stained red.
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Published Date</th>
<th>PMID</th>
</tr>
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<tbody>
<tr>
<td>Effect of freezing on recombinant hepatitis E vaccine</td>
<td>Li K, Dong F, Gao F et al.</td>
<td>Hum Vaccin Immunother</td>
<td>2019-12-06</td>
<td>31809644</td>
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<td>Chromium functionalized diglyme plasma polymer coating enhances enzyme-linked immunosorbent</td>
<td>Welch NG, Madiona RM, Easton CD et al.</td>
<td>Biointerphases</td>
<td>2016-01-01</td>
<td>27835921</td>
</tr>
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<td>A chemiluminescent sandwich ELISA enhancement method using a chromium (III) coordination</td>
<td>Welch NG, Easton CD, Scoble JA et al.</td>
<td>J Immunol Methods</td>
<td>2016-01-01</td>
<td>27650427</td>
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<td>Type VIII collagen is elevated in diseases associated with angiogenesis and vascular</td>
<td>Hansen NU, Willumsen N, Sand JM et al.</td>
<td>Clin Biochem.</td>
<td>2016-01-01</td>
<td>27234597</td>
</tr>
</tbody>
</table>

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Kits are guaranteed for 6 months from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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