

Product Datasheet

Lightning-Link HRP Antibody Labeling Kit 701-0004

Unit Size: 1 Reaction (up to 20 mg)

Store at -20C. Avoid freeze-thaw cycles.

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701-0004**Lightning-Link HRP Antibody Labeling Kit**

Product Information	
Unit Size	1 Reaction (up to 20 mg)
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Conjugate	HRP
Product Description	
Description	<p>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.</p> <p>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.</p> <p>Features/Benefits 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</p> <p>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 in to a water insoluble brown pigment. Other substrates which can be used to measure horseradish peroxidase activity include ABTS, TMB and TMBUS.</p> <p>Popular conjugates applications:</p> <ol style="list-style-type: none"> 1. Western Blot 2. Immunohistochemistry 3. ELISA
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	<p>Learn more about Lightning-Link™ Conjugation Kits by reading FAQs</p> <p>For more information please check out these useful links! Fluorescent Labels Poster Antibody Labeling Guide Antibody Purification Guide</p> <p>Lightning Link® is a registered trademark of Innova Biosciences.</p>
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot, Immunohistochemistry-Paraffin

Images

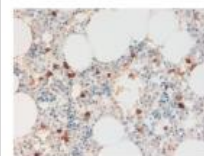
Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0004]

	conjugated	unconjugated
Primary antibody	Goat Anti-GFAP	Goat Anti-GFAP
Target	GFAP	GFAP
Sample lysate	mouse brain	mouse brain
Primary antibody working concentration	0.185 µg/ml	0.5 µg/ml
Secondary antibody used	no (direct conjugation)	yes
Exposure time (min)	3	3
Primary antibody source	Everest Biotech, Cat no: EB07478	
Western blot analysis		

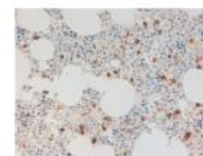
Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0004]

Lightning-Link® Comparative Data

Anti-human CD20 (clone L26) was conjugated to HRP using Lightning-Link® kits, and used in IHC in comparison to a traditional indirect technique



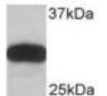
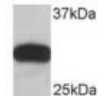
Unconjugated L26, visualised with Dako EnVision



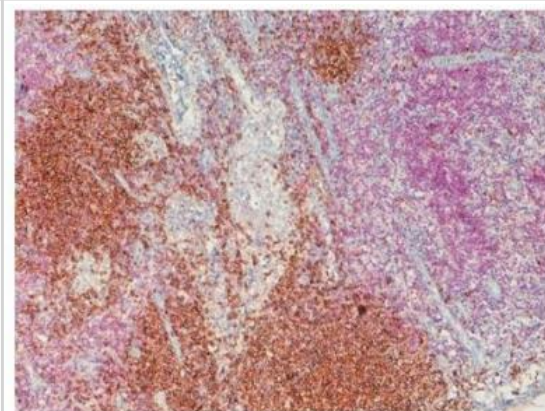
HRP conjugated L26, 1/100

Samples shown are formalin-fixed, paraffin-embedded human bone marrow. CD20 is a B cell specific marker.

Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0004]

	conjugated	unconjugated
Primary antibody	Goat Anti-NQO1	Goat Anti-NQO1
Target	quinone reductase 1	quinone reductase 1
Sample lysate	human kidney	human kidney
Primary antibody working concentration	0.00425 µg/ml	0.1 µg/ml
Secondary antibody used	no (direct conjugation)	yes
Exposure time (min)	10	10
Primary antibody source	Everest Biotech, Cat no: EB05370	
Western blot analysis		

Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0004] - 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.



Publications

Welch NG, Lebot CJ, Easton CD et al. Polypropylene microtitre plates modified with [Cr(OH)₆]³⁺ - for enhanced ELISA sensitivity. *J Immunol Methods*. 2017 [PMID: 28365327]

Hijmans RS, Rasmussen DG, Yazdani S et al. Urinary collagen degradation products as early markers of progressive renal fibrosis. *J Transl Med*. 2017 Mar 20 [PMID: 28320405]

Rasmussen DG, Sand JM, Karsdal MA, Genovese F. Development of a Novel Enzyme-Linked Immunosorbent Assay Targeting a Neo-Epitope Generated by Cathepsin-Mediated Turnover of Type III Collagen and Its Application in Chronic Obstructive Pulmonary Disease. *PLoS One*. 2017 Jan 11 [PMID: 28076408]

Furman JL, Vaquer-Alicea J, White CL 3rd et al. Widespread tau seeding activity at early Braak stages. *Acta Neuropathol*. 2017 [PMID: 27878366]

Welch NG, Madiona RM, Easton CD et al. Chromium functionalized diglyme plasma polymer coating enhances enzyme-linked immunosorbent assay performance. *Biointerphases*. 2016 [PMID: 27835921]

Welch NG, Easton CD, Scoble JA et al. A chemiluminescent sandwich ELISA enhancement method using a chromium (III) coordination complex. *J Immunol Methods*. 2016 [PMID: 27650427]

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Mao S, Ou X, Zhu D et al. Development and evaluation of indirect ELISAs for the detection of IgG, IgM and IgA1 against duck hepatitis A virus 1. *J Virol Methods*. 2016 [PMID: 27577105]

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Xu QY, Sun EC, Feng YF et al. Development of a novel protein chip for the detection of bluetongue virus in China. *J Virol Methods*. 2016 [PMID: 27063641]

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