

Product Datasheet

Lightning-Link (R) HRP Antibody Labeling Kit 701-0000

Unit Size: 3 x 100ug Reaction

Store at -20C.

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701-0000**Lightning-Link (R) HRP Antibody Labeling Kit**

Product Information	
Unit Size	3 x 100ug Reaction
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Store at -20C.
Conjugate	HRP
Buffer	
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 (See protocol for further information).</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>Learn more about Lightning-Link™ Conjugation Kits by reading FAQs</p> <p>For more information please check out these useful links! Antibody Labeling Guide Antibody Conjugation Illustrated Assay</p>
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>This product is manufactured by Abcam and distributed by Novus Biologicals.</p> <p>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.</p>
Product Application Details	

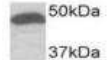



Applications	Western Blot, Immunohistochemistry, In vivo assay
Recommended Dilutions	Western Blot, Immunohistochemistry, In vivo assay
Application Notes	By circumventing the desalting or dialysis steps that commonly interrupt traditional antibody conjugation procedures, LightningLink technology can be 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 3 vials, each suitable for labeling up to 400 ug of antibody.



Images

Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0000]

	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: Lightning-Link HRP Antibody Labeling Kit [701-0000]

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



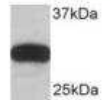
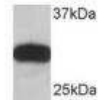
Un conjugated L26, visualised with Dako EnVision



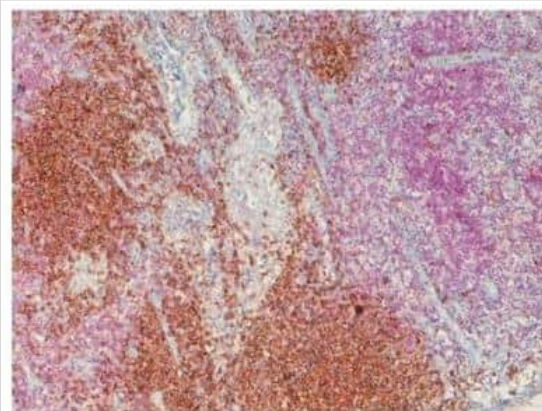
HRP conjugated L26, 1/100

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 [701-0000]

	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: Lightning-Link HRP Antibody Labeling Kit [701-0000] - 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

Joensuu M, Syed P, Saber SH et al. Presynaptic targeting of botulinum neurotoxin type A requires a tripartite PSG-Syt1-SV2 plasma membrane nanocluster for synaptic vesicle entry The EMBO Journal 2023-07-03 [PMID: 37226896] (ELISA)

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Davies GE, Thornton CR. Development of a Monoclonal Antibody and a Serodiagnostic Lateral-Flow Device Specific to Rhizopus arrhizus (Syn. R. oryzae), the Principal Global Agent of Mucormycosis in Humans Journal of Fungi 2022-07-21 [PMID: 35887511]

Lee HW, Yang CY, Lee MC et al. The Use of Distinctive Monoclonal Antibodies in FMD VLP- and P1-Based Blocking ELISA for the Seromonitoring of Vaccinated Swine International journal of molecular sciences 2022-08-01 [PMID: 35955678]

Murray LP, Mace CR Paper-Based Cytometer for the Detection and Enumeration of White Blood Cells According to Their Immunophenotype Analytical chemistry 2022-06-13 [PMID: 35696545]

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Jadhav S, Tripathi S, Chandrekar A, et al. A novel antibody for the detection of alternatively spliced secreted KLOTHO isoform in human plasma PloS one 2021-01-22 [PMID: 33481901]

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Lillo AM, Velappan N, Kelliher JM, Watts AJ Development of Anti-Yersinia pestis Human Antibodies with Features Required for Diagnostic and Therapeutic Applications ImmunoTargets and Therapy 2020-01-01 [PMID: 33294421]

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Hijmans RS, Rasmussen DG, Yazdani S et al. Urinary collagen degradation products as early markers of progressive renal fibrosis. J Transl Med. 2017-03-20 [PMID: 28320405]

More publications at <http://www.novusbio.com/701-0000>





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