# **Product Datasheet**

# Lightning-Link (R) HRP Antibody Labeling Kit 701-0030

Unit Size: 3 x 10ug Reaction

Store at -20C.

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# 701-0030

Lightning-Link (R) HRP Antibody Labeling Kit

Lightning-Link (R) HRP Antibody	Labeling Kit			
Product Information				
Unit Size	3 x 10ug 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			
<b>Product Description</b>				
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.  FeaturesBenefitsQuick and easy to useSave time, no special knowledge requiredNo separation steps100% recovery - no antibody/protein lossCan be used in a wide range of applicationsFlexibleFreeze driedShips at ambient temperature, long shelf-lifeFully scalable (10 ug to 1 g or more)Easy transfer from R&D to manufacturingStringently QC testedConsistent high quality, excellent batch-to-batch reproducibilityLarge number of labels available Experimental flexibilityReliable: nearly 300 referencesSuccessfully 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 (H202) 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.  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			

	3
Recommended Dilutions	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
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 40 ug of antibody.



# **Images**

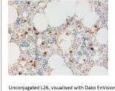
Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0030]

	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	50kDa	50kDa
Western olde analysis	37kDa	37kDa

Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0030]

# 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

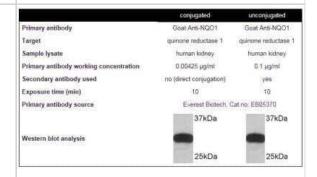




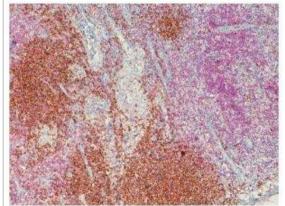
Unconjugated L26, visualised with Dako EnVision

n are formalin-fixed, paraffin-embedded human bone marrow. CD20 is a B

Western Blot: Lightning-Link HRP Antibody Labeling Kit [701-0030]



Immunohistochemistry-Paraffin: Lightning-Link HRP Antibody Labeling Kit [701-0030] - 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**

Srivastava S, Sahu U, Zhou Y, et al. NOTCH1-driven UBR7 stimulates nucleotide biosynthesis to promote T cell acute lymphoblastic leukemia Science Advances 2021-01-01 [PMID: 33571115]

Suska A, Filippini D Autonomous lab-on-a-chip generic architecture for disposables with integrated actuation Sci Rep 2019-12-30 [PMID: 31889049]

Li K, Dong F, Gao F et al. Effect of freezing on recombinant hepatitis E vaccine Hum Vaccin Immunother 2019-12-06 [PMID: 31809644]

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Welch NG, Lebot CJ, Easton CD et al. Polypropylene microtitre plates modified with [Cr(OH)6]3 - for enhanced ELISA sensitivity. J Immunol Methods. 2017-01-01 [PMID: 28365327]

Hijmans RS, Rasmussen DG, Yazdani S et al. Urinary collagen degradation products as early markers of progressive renal fibrosis. J Transl Med. 2017-03-20 [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. 2017-01-11 [PMID: 28076408]

Furman JL, Vaquer-Alicea J, White CL 3rd et al. Widespread tau seeding activity at early Braak stages. Acta Neuropathol. 2017-01-01 [PMID: 27878366]

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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. 2016-01-01 [PMID: 27577105]

More publications at <a href="http://www.novusbio.com/701-0030">http://www.novusbio.com/701-0030</a>





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#### Limitations

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