

# Product Datasheet

## Lightning-Link (R) Rapid DyLight 550 Antibody Labeling Kit

**323-0015**

Unit Size: 1 mg

Store at -20C.

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**323-0015****Lightning-Link (R) Rapid DyLight 550 Antibody Labeling Kit**

<b>Product Information</b>	
<b>Unit Size</b>	1 mg
<b>Concentration</b>	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
<b>Storage</b>	Store at -20C.
<b>Conjugate</b>	DyLight 550
<b>Product Description</b>	
<b>Description</b>	<p>Lightning-Link Rapid is an innovative technology that enables direct labeling of proteins, peptides or other biomolecules for use in R&amp;D applications, drug discovery and the development of diagnostic kits (See protocol for further information).</p> <p>The easy-to-use, one step procedure allows researchers to covalently label biomolecules with only 30 seconds hands-on time; furthermore conjugates are ready to use in less than twenty minutes.</p> <p>The researcher simply pipettes the biomolecule into a vial of lyophilized mixture containing the label of interest and incubates (for more details please watch the video below).</p> <p><b>Features</b> Quick and easy to use  <b>Benefits</b> 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&amp;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>DyLight 550 emits vibrant orange-to-red fluorescence for a wide array of fluorescence labeling-based applications. It has a strong absorption at 556nm, high fluorescence at 584nm (extinction coefficient <math>1.5 \times 10^5 \text{ cm}^{-1}\text{M}^{-1}</math>) and high quantum yield.</p> <p>DyLight dyes are extremely bright and are highly water soluble meaning that a high dye-protein ratio can be achieved without precipitation of the conjugates. Furthermore DyLight dyes retain their fluorescence over a pH range of 4-9.</p> <p>Learn more about Lightning-Link™ Conjugation Kits by reading <a href="#">FAQs</a></p> <p>For more information please check out these useful links!  <a href="#">Antibody Labeling Guide</a>  <a href="#">Antibody Conjugation Illustrated Assay</a></p>
<b>Kit Components</b>	1 or 3 glass vial(s) of Lightning-Link Rapid mix, 1 vial of LL-Rapid Modifier reagent, 1 vial of LL-Rapid Quencher reagent

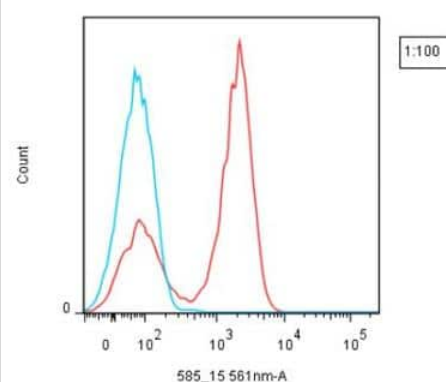
<b>Notes</b>	<p>This product is manufactured by Abcam and distributed by Novus Biologicals.</p> <p>This product is for research use only and is not approved for use in humans or in clinical diagnosis. This product is guaranteed for 1 year from date of receipt and this statement overrides any mentioned guarantee period on the limitations section of this products datasheet. Please contact <a href="mailto:technical@novusbio.com">technical@novusbio.com</a> with questions.</p>
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## Product Application Details

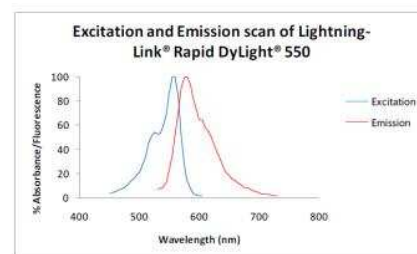
<b>Applications</b>	Flow Cytometry
<b>Recommended Dilutions</b>	Flow Cytometry
<b>Application Notes</b>	<p>By circumventing the desalting or dialysis steps that commonly interrupt traditional antibody conjugation procedures, LightningLink technology can be used to label both small (e.g. 10 ug) and large 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%.</p>

## Images

Flow Cytometry: Lightning-Link Rapid DyLight 550 Antibody Labeling Kit [323-0015] - Mouse anti-human CD3 was conjugated with Dylight® 550 using Lightning-Link® Rapid kit. The conjugated antibody was then used to stain human peripheral blood lymphocytes, followed by analysis with flow cytometry. (Blue line - negative control; red line - positive staining).



Lightning-Link Rapid DyLight 550 Antibody Labeling Kit [323-0015]



Scan performed in TBS pH 8.0

Absorbance Max (nm)	Emission Max (nm)	Extinction Coefficient (cm <sup>2</sup> M <sup>-1</sup> )	Fluorescent Colour	Stokes Shift
562	576	150000	Orange	14

## Publications

Mihklepp K, Kivirand K, Nikopensus M et al. Design and Production of Antibodies for the Detection of Streptococcus uberis. Enzyme Microb Technol. 2017-01-01 [PMID: 27871373]



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### **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.

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