

# Product Datasheet

## Lightning-Link (R) PerCP-Cy5.5 Antibody Labeling Kit 763-0005

Unit Size: 100 ug

Store at -20C.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Publications: 15**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/763-0005](http://www.novusbio.com/763-0005)

Updated 5/1/2024 v.20.1

**Earn rewards for product  
reviews and publications.**

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/763-0005](http://www.novusbio.com/reviews/destination/763-0005)



**763-0005****Lightning-Link (R) PerCP-Cy5.5 Antibody Labeling Kit**

| <b>Product Information</b>         |   |
|------------------------------------|---|
| <b>Unit Size</b>                   | 100 ug  |
| <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>                   | PerCP/Cy5.5   |
| <b>Product Description</b>         |   |
| <b>Description</b>                 | <p>Lightning-Link antibody labeling kits enable the direct labeling of antibodies, 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>Our PerCP/Cy5.5 antibody labeling kit enables the direct conjugation of the PerCP/Cy5.5 tandem dye to any biomolecule with an available amine group. The researcher simply pipettes the antibody or other biomolecule into the vial of Lightning-Link label and incubates for 3 hours.</p> <p><b>Features</b>Quick and easy to use<br/><b>Benefits</b>Save time, no special knowledge required<br/>No separation steps<br/>100% recovery - no antibody/protein loss<br/>Can be used in a wide range of applications<br/>Flexible<br/>Freeze dried<br/>Ships at ambient temperature, long shelf-life<br/>Fully scalable (10 ug to 1 g or more)<br/>Easy transfer from R&amp;D to manufacturing<br/>Stringently QC tested<br/>Consistent high quality, excellent batch-to-batch reproducibility<br/>Large number of labels available<br/>Experimental flexibility<br/>Reliable: nearly 300 references<br/>Successfully used in many fields of research</p> <p>PerCP/Cy5.5 is a tandem label. The PerCP excited at 484nm and functions as an energy donor for the Cy5.5. Energy is transferred from the PerCP to the Cy5.5 via energy resonance transfer. The Cy5.5 emits the energy received from the PerCP in the form of long wavelength light at 692nm.</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!<br/><a href="#">Antibody Labeling Guide</a><br/><a href="#">Antibody Conjugation Illustrated Assay</a></p> |
| <b>Kit Components</b>              | 1 or 3 glass vial(s) of Lightning-Link mix, 1 vial of LL-Modifier reagent, 1 vial of LL-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>   |
| <b>Product Application Details</b> |   |
| <b>Applications</b>                | Flow Cytometry  |
| <b>Recommended Dilutions</b>       | Flow Cytometry  |

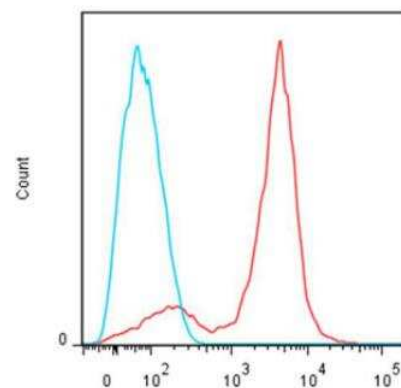


**Application Notes**

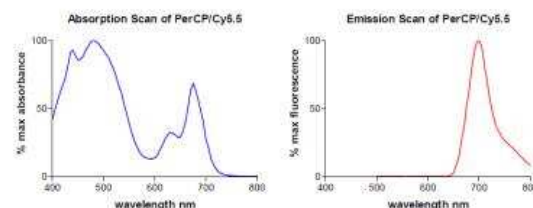
PerCP/Cy5.5 is a tandem conjugate. In our Lightning-Link PerCP/Cy5.5 the best result is obtained when the tandem is excited at 488nm, wavelength at which the PerCP has its maximum absorption. The excited PerCP functions as an energy donor, where the energy is transferred via FRET (Fluorescence Resonance Energy Transfer) to the Cy5.5. The Cy5.5 emits then the energy received from the PE in the form of long wavelength light at 700nm. Use in FLOW cytometry reported in scientific literature ( PMID 26483406). This kit can be used to label up to 100 ug of antibody, and is supplied in one vial.

**Images**

Flow Cytometry: Lightning-Link PerCP-Cy5.5 Antibody Labeling Kit [763-0005] - Mouse anti-human CD3 was conjugated with PerCP/Cy5.5 using Lightning-Link® 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 PerCP-Cy5.5 Antibody Labeling Kit [763-0005]



| Absorbance Max (nm) | Emission Max (nm) | Fluorescent Colour | Stokes Shift |
|---------------------|-------------------|--------------------|--------------|
| 482                 | 700               | Red                | 218          |

## Publications

- Titus HE, Xu H, Robinson AP et al. Repurposing the cardiac glycoside digoxin to stimulate myelin regeneration in chemically-induced and immune-mediated mouse models of multiple sclerosis *Glia* 2022-07-09 [PMID: 35809238]
- Goto S, Konnai S, Okagawa T et al. Increase of cells expressing PD-1 and PD-L1 and enhancement of IFN- $\gamma$  production via PD-1/PD-L1 blockade in bovine mycoplasmosis. *Immun Inflamm Dis*. 2017-01-01 [PMID: 28544524]
- Kjaerup RB, Juul-Madsen HR, Norup LR et al. Comparison of growth performance and immune parameters of three commercial chicken lines used in organic production. *Vet Immunol Immunopathol*. 2017-01-01 [PMID: 28494932]
- Nishimori A, Konnai S, Okagawa T et al. In vitro and in vivo antiviral activity of an anti-programmed death-ligand 1 (PD-L1) rat-bovine chimeric antibody against bovine leukemia virus infection. *PLoS One*. 2017-04-26 [PMID: 28445479]
- Riley SP, Fish AI, Garza DA et al. Non-selective Persistence of a Rickettsia conorii Extrachromosomal Plasmid During Mammalian Infection *Infect Immun*. 2016-01-11 [PMID: 26755154] (FLOW)
- Okagawa T, Konnai S, Nishimori A et al. Bovine immunoinhibitory receptors contribute to the suppression of Mycobacterium avium subsp. paratuberculosis-specific T-cell responses *Infect Immun*. 2015-10-19 [PMID: 26483406] (FLOW)
- Vremec D. The Isolation and Enrichment of Large Numbers of Highly Purified Mouse Spleen Dendritic Cell Populations and Their In Vitro Equivalents *Methods Mol Biol*. 2016-01-01 [PMID: 27142009] (FLOW)
- Kitazawa Y, Ueta H, Hunig T et al. A novel multicolor immunostaining method using ethynyl deoxyuridine for analysis of in situ immunoproliferative response *Histochem Cell Biol*. 2015-09-01 [PMID: 25976155] (FLOW)
- Dooley J, Garcia-Perez JE, Sreenivasan J et al. The microRNA-29 Family Dictates the Balance Between Homeostatic and Pathological Glucose Handling in Diabetes and Obesity *Diabetes* 2016-01-01 [PMID: 26696639] (FLOW)
- Okagawa T, Konnai S, Deringer JR et al. Cooperation of PD-1 and LAG-3 contributes to T-cell exhaustion in Anaplasma marginale-infected cattle *Infect Immun*. 2016-07-18 [PMID: 27430272] (FLOW)
- Goode D, Truong R, Villegas G et al. Driven Increase in the Expression of  $\alpha 4\beta 7$  Correlates with Increased Susceptibility to Vaginal SHIVSF162P3 Infection *PLoS Pathog* 2014-12-18 [PMID: 25521298] (FLOW)
- Slota C, Shi A, Chen G et al. Norepinephrine preferentially modulates memory CD8 T cell function inducing inflammatory cytokine production and reducing proliferation in response to activation. *Brain Behav Immun*. 2015-01-01 [PMID: 25653192] (FLOW)

More publications at <http://www.novusbio.com/763-0005>





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **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](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/763-0005](http://www.novusbio.com/reviews/submit/763-0005)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

