

Datasheet: LNK024RPE

BATCH NUMBER 168978

Description:	LYNX RAPID RPE ANTIBODY CONJUGATION KIT
Name:	RPE CONJUGATION KIT
Format:	Kit
Product Type:	Conjugation Kit
Quantity:	3 CONJUGATIONS for 10µg antibody

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Conjugation	▪			

We recommend that for each conjugation the user determines the best antibody:conjugate ratio.

Product Information

LYNX Rapid RPE Antibody Conjugation Kit® enables the rapid conjugation of a pre-prepared lyophilized mixture containing R-Phycoerythrin (RPE) label to an antibody or protein. Activation of proprietary reagents within the antibody-label solution results in directional covalent bonding of RPE to the antibody.

The LYNX Rapid Conjugation kit® can be used to label small quantities of antibody/protein at near neutral pH, allowing a high conjugation efficiency with 100% antibody recovery.

Reagents In The Kit

3 Vials of 10ug LYNX lyophilized RPE mix
1 Vial LYNX Modifier reagent
1 Vial LYNX Quencher reagent

Preparing The Antibody

The following buffer solutions are recommended for preparing the antibody:

10-50mM amine-free buffer (e.g HEPES, MES, MOPS and phosphate) pH range 6.5-8.5, although moderate concentrations of Tris buffer (<20mM) may be tolerated.

If possible, avoid buffers containing nucleophilic components such as primary amines and thiols (e.g. thiomersal/thimerosal) since they may react with LYNX

chemicals. Azide (0.02-0.1%), EDTA, up to 50% Glycerol and common non-buffering salts and sugars have little or no effect on conjugation efficiency.

Due to the large size of RPE (240kDa), the quantity of RPE is in slight molar excess. Approximately 10ug of IgG will give a 1:1 molar ratio of antibody:RPE. For optimal results the antibody should be at a concentration of 1mg/ml, with a maximum volume of 10ul and a maximum antibody amount of 10ug. Antibody at a concentration of greater than 1mg/ml requires dilution. Antibody below 1mg/ml can still be used as long as the maximum volume is not exceeded. Using less than the recommended amount of antibody may result in unbound label, but this will be removed during subsequent application wash steps. Antibody below 0.5mg/ml should be concentrated before use with the kit.

Instructions For Use

1. To the antibody sample add 1ul of the Modifier reagent for every 10ul of antibody and mix gently.
2. Pipette the mixed antibody-modifier sample directly onto the LYNX lyophilized mix and gently pipette up and down twice to resuspend.
3. Replace cap onto vial and incubate in the dark at room temperature (20-25°C) for 3 hours, or overnight if preferred.
4. After incubation, add 1ul of Quencher reagent for every 10ul of antibody used. Leave to stand for 30 minutes before use.

References

1. Li, X. *et al.* (2010) Design of a potent CD1d-binding NKT cell ligand as a vaccine adjuvant. [Proc Natl Acad Sci U S A. 107: 13010-5.](#)
2. Campbell, J.E. *et al.* (2010) Cellular regulation of blood coagulation: a model for venous stasis. [Blood. 116: 6082-91.](#)
3. Tighe, R.M. *et al.* (2011) Ozone Inhalation Promotes CX3CR1-Dependent Maturation of Resident Lung Macrophages That Limit Oxidative Stress and Inflammation. [J Immunol. 187: 4800-8.](#)
4. Dutertre, C.A. *et al.* (2008) A novel subset of NK cells expressing high levels of inhibitory FcγRIIB modulating antibody-dependent function. [J Leukoc Biol. 84: 1511-20.](#)
5. Wielgosz, M.M. *et al.* (2015) Generation of a lentiviral vector producer cell clone for human Wiskott-Aldrich syndrome gene therapy. [Mol Ther Methods Clin Dev. 2: 14063.](#)
6. Hofer, C.C. *et al.* (2015) Infection of Mice with Influenza A/WSN/33 (H1N1) Virus Alters Alveolar Type II Cell Phenotype. [Am J Physiol Lung Cell Mol Physiol. ajplung.00373.2014.](#)
7. Welinder, C. *et al.* (2015) Cytokeratin 20 improves the detection of circulating tumor cells in patients with colorectal cancer. [Cancer Lett. 358:43-6.](#)
8. Shive, C.L. *et al.* (2014) Inflammatory cytokines drive CD4+ T-cell cycling and impaired responsiveness to interleukin 7: implications for immune failure in HIV disease. [J Infect Dis. 210: 619-29.](#)
9. Hofer, S. *et al.* (2016) RAGE-mediated inflammation in patients with septic shock. [J Surg Res. 202 \(2\): 315-27.](#)
10. Attatippaholkun, N. *et al.* (2017) Dengue Virus and Its Relation to Human Glycoprotein

IIb/IIIa Revealed by Fluorescence Microscopy and Flow Cytometry. [Viral Immunol. 30 \(9\): 654-61.](#)

11. Botha, J. *et al.* (2022) Lipid-based strategies used to identify extracellular vesicles in flow cytometry can be confounded by lipoproteins: Evaluations of annexin V, lactadherin, and detergent lysis. [J Extracell Vesicles. 11 \(4\): e12200.](#)

12. Jax, E. *et al.* (2023) Evaluating Effects of AIV Infection Status on Ducks Using a Flow Cytometry-Based Differential Blood Count. [Microbiol Spectr. 11 \(4\): e0435122.](#)

13. Haach, V. *et al.* (2023) A polyvalent virosomal influenza vaccine induces broad cellular and humoral immunity in pigs. [Virology J. 20 \(1\): 181.](#)

14. Sabsabi, M.A. *et al.* (2024) Unraveling the role of $\gamma\delta$ T cells in the pathogenesis of an oncogenic avian herpesvirus. [mBio. 15 \(8\): e0031524.](#)

Storage This kit contains lyophilized hygroscopic components that are moisture-sensitive. This kit is shipped under ambient conditions with silica packets to avoid exposure to moisture. On receipt, Bio-Rad recommend that the kit is stored at -20°C and protected from moisture. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing. Before opening, allow the components to reach room temperature to minimize condensation.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10531 #10546 #10548 available at: <https://www.bio-rad-antibodies.com/SDS/LNK024RPE>
Lyophilized RPE Mix (10531)
Modifier Reagent (10546)
Quencher Reagent (10548)

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'M390396:210910'

Printed on 29 Aug 2024