LEADGENE
LEADGENE BIOMEDICAL, INC.

Product Information & Manual

Information of other products is available at: www.leadgenebio.com

HyLink™ Biotin Labeling Kit

Cat no. LDG0004RC/LDG0005RC/LDG0006RC

Product Overview

Package component

Item	LDG0004RC (10 µg x 3)	LDG0005RC (100 µg x 3)	LDG0006RC (1 mg x 1)
Biotin	3 vials	3 vials	1 vial
10X Modifier	1 vial	1 vial	1 vial
10X Quencher	1 vial	1 vial	1 vial

Description

Biotin is a widely used and powerful tool for research due to the specific and high affinity with streptavidin/avidin. Antibody or protein conjugated with several biotin molecules can also amplify the detection signal through streptavidin-conjugated molecule such as streptavidin-HRP, streptavidin-FITC, etc. Biotinylated antibody or protein can be used in various applications including ELISA, WB, IHC, IFA and FACS. Leadgene HyLink™ Biotin Labeling Kit is designed for biotinylation of a small quantity (10 µg-1 mg) of antibody or protein. It provides a rapid and easy process with high efficiency to conjugate biotin to antibody or protein.

Storage and Stability

(1) Stored at -20°C. Avoid repeated freeze/thaw cycles.
(2) Equilibrate kit to room temperature before use.
(3) Is stable for one year under proper storage conditions.

Procedure

Biotin conjugation protocol

(1) Dissolve antibody in PBS or other buffers that do not contain amine, Tris or glycerol. Use **10X Modifier** (e.g. Add 1 µL of 10X Modifier for 9 µL of antibody) or dialysis against PBS if pH value of used buffer is out of 7 to 8.
(2) Spin down and equilibrate the vial of **Biotin** at room temperature before opening the cap.
(3) Make sure all buffers are well dissolved before using. If not, please vortex the vial to make salts dissolved.
(4) Remove the cap of the vial of **Biotin** and pipette antibody into the vial. Mix gently by pipetting several times.
(5) Cover the cap and incubate in the dark at room temperature for 3 hours.
(6) After incubating, add **10X Quencher** (e.g. 1 µL of 10X Quencher for 9 µL of antibody-biotin mixture) and mix gently by pipetting. The conjugates can be used after 30 minutes.

* For protein conjugation, the amount of protein can be calculated by formula below:

Quantities of protein = quantities of kit (e.g. 10 µg) x (M.W. of target protein) / (150 (M.W. of IgG)

Important notes

(1) Antibody concentrations of 1-4 mg/mL generally give optimal results. Recommended amount and volume of antibody for optimal results.

Kit size	Antibody amount	Reaction volume
3 x 10 µg	10-20 µg	4-20 µL
3 x 100 µg	100-200 µg	40-200 µL
1 x 1 mg	1-2 mg	400-2000 µL

(2) Common non-buffering salts (e.g. sodium chloride) have no effect on conjugation efficiency. Avoid buffer component that contains primary amine (e.g. amino acid or ethanolamine) and thiols (e.g. 2-Mercaptoethanol or DTT).

Components that have on effect or little effect on labeling reaction:

LEADGENE
www.leadgenebio.com
TEL: +886-6-253-6677 • Email: info@leadgene.com.tw • No.9, Ln. 147, Zhengbei 1st Rd., Yongkang Dist., Tainan City 710, Taiwan

-up to 50 mM Tris

-up to 50 mM HEPES

-up to 10% glycerol

-up to 0.02% sodium azide

Disclaimer

This product is for research use only and is not intended for diagnostic use.

LEADGENE BIOMEDICAL, INC.

No.9, Ln. 147, Zhengbei 1st Rd., Yongkang Dist., Tainan City 710, Taiwan R.O.C. TEL: +886-6-2536677 FAX: +886-6-2531536

www.leadgenebio.com