

Product datasheet

Streptavidin AZDye™ 647 Monovalent Antibody Labeling Kit ab272190

[1 References](#) [3 Images](#)

Overview

Product name Streptavidin AZDye™ 647 Monovalent Antibody Labeling Kit

Product overview Streptavidin AZDye™ 647 Antibody Labeling Kit ab272190 is used to label biotinylated antibodies with AZDye™ 647.

The Antibody - Streptavidin AZDye™ 647 (Monovalent) complex produced with this kit is stable and can be used in the same way as antibodies conjugated directly with fluorochromes.

Several antibodies can be labeled with this kit, and its associated kits, and used together in the same experiment.

Use this kit to:

- Label biotinylated antibodies with fluorescent dyes, and use them in immunostaining just like a directly dye conjugated antibody

- Label two or more biotinylated antibodies with different fluorescent dyes* and then use them together in the same experiment

*multiple kits required, see list below

- Label as little as 0.1 µg of biotinylated antibody in less than 5 mins without washes

Technical notes

The 50 µg size of this kit is typically sufficient to label 50 µg of antibody.

When the antibody - streptavidin complex is produced with this kit, due to the monovalent nature of the streptavidin and the blocking solution, there is no risk of forming aggregates of multiple antibodies.

The antibody - streptavidin complex is also very stable, if 2 or more biotinylated antibodies are labeled with different dyes, and then mixed, no dye will transfer between the antibodies.

List of available monovalent streptavidin antibody labeling kits

Streptavidin AZDye™ 488 Antibody Labeling Kit ([ab272187](#))

Streptavidin Atto 542 ([ab272188](#))

Streptavidin AZDye™ 594 ([ab272189](#))

Streptavidin AZDye™ 647 Antibody Labeling Kit (This kit)

Note: the streptavidin in this kit contains very small amounts of non-monovalent streptavidin, when used with the blocking buffer included in the kit, this does not affect the conjugated antibodies.

This product was previously called Streptavidin Alexa Fluor® 647 Antibody Labeling Kit.

Tested applications

Suitable for: Flow Cyt, IHC

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	50 µg
Biotin block buffer	1 x 500µl
Streptavidin AZDye™ 647 (Monovalent) labeling reagent	1 x 500µl

Applications

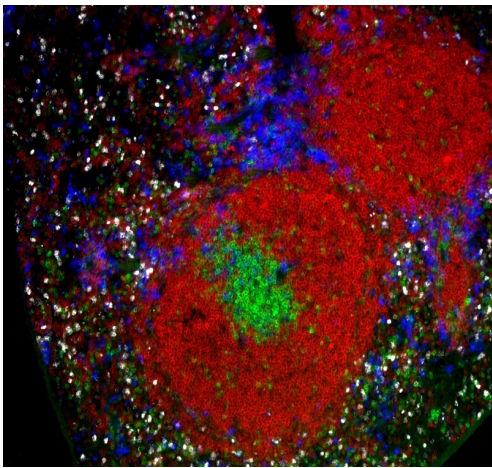
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab272190 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

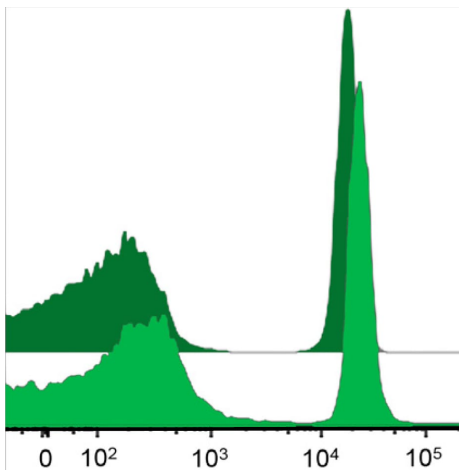
Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
IHC		Use at an assay dependent concentration.

Images



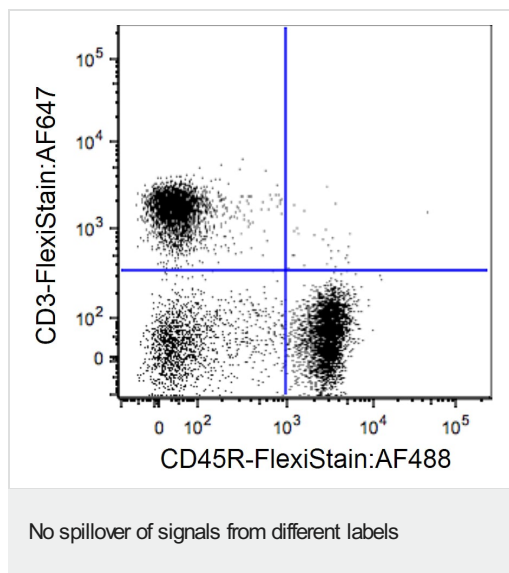
Multiplex 4 color staining

Multiplex immunostaining of a frozen tissue section of mouse spleen using four biotinylated antibodies labeled using Streptavidin (Monovalent) kits. T cells (rat anti-CD3, 7 $\mu\text{g/ml}$, green), B cells (rat anti-CD45R, 7 $\mu\text{g/ml}$, red), macrophages (rat anti-CD11b, 7 $\mu\text{g/ml}$, white), and dendritic cells (hamster anti-CD11c, 7 $\mu\text{g/ml}$, blue) were detected using Streptavidin (Monovalent) kits with four different fluorochromes. Picture was taken with a standard fluorescence microscope equipped with appropriate filters for optimal multicolor separation.



Brightness compared to directly conjugated antibodies

Antibodies labeled with Streptavidin (Monovalent) kits are as bright as directly conjugated antibodies. Flow cytometry analysis of splenic B lymphocytes immunolabeled with antibodies against CD45R (B220, clone RA3-6B2, 7 $\mu\text{g/ml}$). Dark green = directly conjugated antibody, light green = Streptavidin (Monovalent)-labeled antibody.



No spillover of signals between Streptavidin (Monovalent)-labeled antibodies. Flow cytometry analysis of T and B cells immunolabeled (7 µg/ml) with Streptavidin AZDye™ 647 (Monovalent) (ab272190) and Streptavidin AZDye™ 488 (Monovalent) ([ab272187](#)).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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