CytoWatch™ Endogenous Biotin Blocking Kit

Catalog number: 20047
Unit size: 10 mL

Component	Storage	Amount (Cat No. 20047)
Component A: Streptavidin Solution (10X)	Refrigerated (2-8 °C)	10 mL
Component B: Biotin Solution (10X)	Refrigerated (2-8 °C)	10 mL

OVERVIEW

The CytoWatch™ Endogenous Biotin Blocking Kit is designed to reduce background signal in immunohistochemistry (IHC), immunofluorescence (IF), and other avidin–biotin based detection systems by effectively blocking endogenous biotin. Endogenous biotin is often present in cells and tissues where it can lead to nonspecific binding and false-positive staining when using biotinylated probes.

This kit includes two components: a streptavidin solution to bind all endogenous biotin molecules and a subsequent biotin solution to block unoccupied streptavidin sites. This two-step blocking strategy ensures complete suppression of background caused by endogenous biotin, enabling higher specificity and clarity in staining results. The CytoWatch™ kit is easy to use and integrates seamlessly into existing IHC and IF protocols.

AT A GLANCE

1. Prepare test samples (tissue or cells).
2. Add streptavidin working solution, incubate for 15 min at RT, then wash the samples.
3. Add biotin working solution, incubate for 15 min at RT, then wash the samples.
4. Biotin blocked samples are ready for downstream processing.

PREPARATION OF STOCK SOLUTIONS

Streptavidin Working Solution:

Add 100 µL Component A (Streptavidin Solution) to 900 µL PBS.

Biotin Working Solution:

Add 100 µL Component B (Biotin Solution) to 900 µL PBS.

SAMPLE EXPERIMENTAL PROTOCOL

Tissue Sections Blocking Protocol:

1. Add streptavidin working solution.
2. Incubate for 15 min at RT. Wash the samples.
3. Add biotin working solution.
4. Incubate for 15 min at RT. Wash the samples
5. Biotin blocked samples are ready for downstream processing.

Note: This blocking buffer can be diluted in normal blocking buffer (preferably biotin-free if using serum).

EXAMPLE DATA ANALYSIS AND FIGURES

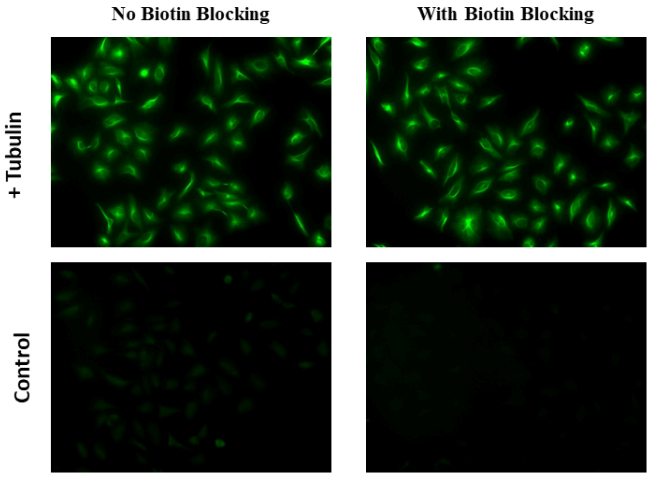

Figure 1. HeLa cells were fixed, permeabilized, and treated without or with the CytoWatch™ Endogenous Biotin Blocking Kit (Cat. #20047). Following treatment, cells were incubated with α-tubulin mouse monoclonal antibody (1 µg/mL), then labeled with goat anti-mouse IgG–biotin conjugate (Cat. #16729). Detection was performed using streptavidin–iFluor 488 (Cat. #16955). Fluorescence images were acquired using a Keyence fluorescence microscope equipped with a FITC filter set.

DISCLAIMER

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