

Endogenous Biotin-Blocking Kit (E-21390)

Quick Facts

Storage upon receipt:

- 4°C

Introduction

Mammalian cells and tissues contain biotin-dependent carboxylases, which are required for a variety of metabolic functions. These biotin-containing enzymes often produce substantial background signals when biotin-avidin or biotin-streptavidin detection systems are used to identify cellular targets.¹

Endogenous biotin can cause high background signals, often concentrated in mitochondria. Endogenous background can be blocked or reduced significantly by the addition of unlabeled avidin or streptavidin to the specimen. The avidin or streptavidin is in turn blocked with an excess of unlabeled biotin. After this pretreatment, normal blocking and labeling-methods can be used.²⁻⁴

Molecular Probes' Endogenous Biotin-Blocking Kit (E-21390) provides streptavidin and biotin solutions in convenient dropper bottles. This kit can be used to minimize interference from endogenous biotin when using our biotin-tyramide-containing TSA kits, or during conventional immunohistochemistry, immunocytochemistry, RNA FISH or ELISA procedures.

References

1. J Histochem Cytochem 45, 1053 (1997); 2. J Histochem Cytochem 29, 1196 (1981); 3. Histochemistry 83, 325 (1985); 4. Methods Enzymol 184, 201 (1990).

Product List *Current prices may be obtained from our Web site or from our Customer Service Department.*

Cat #	Product Name	Unit Size
E-21390	Endogenous Biotin-Blocking Kit *100 assays*	1 kit

Materials

Contents

- Streptavidin reagent (Component A), 10 mL in a dropper bottle
- Biotin reagent (Component B), 10 mL in a dropper bottle

Sufficient material is provided for approximately 100 18 mm × 18 mm glass coverslips.

Storage

The components of this kit are stable for at least three months when stored at 4°C.

Application

1.1 Fix and permeabilize the cells or tissue according to normal procedures.

1.2 Apply one or two drops of the streptavidin reagent (Component A) to the cells or tissue, and incubate for 15–30 minutes at room temperature or 37°C in a humid environment.

1.3 Rinse thoroughly with buffer, e.g. phosphate-buffered saline (PBS).

1.4 Add one or two drops of the biotin reagent (Component B), and incubate 15–30 minutes at room temperature or 37°C in a humid environment.

1.5 Rinse thoroughly with buffer.

1.6 Proceed with normal blocking and labeling procedures.

Contact Information

Further information on Molecular Probes' products, including product bibliographies, is available from your local distributor or directly from Molecular Probes. Customers in Europe, Africa and the Middle East should contact our office in Leiden, the Netherlands. All others should contact our Technical Assistance Department in Eugene, Oregon.

Please visit our Web site — www.probes.com — for the most up-to-date information

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