



KPL Silver Enhancer Kit

for Microscopy Applications

Catalog No.
5520-0021 (50-22-01)

Size
50 mL

DESCRIPTION

KPL Silver Enhancer Kit for Microscopy Applications is a sensitive and simple method for the enhancement of gold labeled samples when viewed using a light microscope. The resulting brown/black stain is permanent and offers sharp resolution and contrast with colored counterstains.

CONTENTS

This kit contains:
KPL Silver Enhancer Solution A (red cap)
KPL Silver Enhancer Solution B (blue cap)

STORAGE/STABILITY

Store at 2 - 8°C. Stable for a minimum of 4 months from date of receipt when stored at 2 - 8°C. **DO NOT FREEZE.** Do not expose to extreme heat or light.

APPLICATIONS

The KPL Silver Enhancer Kit for Microscopy Applications is suitable for use in enhancing the sensitivity of gold conjugates used in light microscopy applications.

PROCEDURE

1. If using paraffin embedded tissue sections, deparaffinize according to standard protocols.
2. Apply the gold conjugated primary antibody or primary antibody followed by a gold conjugated secondary antibody, and incubate as instructed.
3. Wash as instructed.
4. Mix equal volumes of KPL Solution A and KPL Solution B into a plastic tube. The recommended amount per slide is 500 µL - 1.0 mL/slide.
5. Incubate the slide with KPL Silver Enhancer.

NOTE: The incubation time may need to be optimized depending upon the assay system. As soon as a brownish color is seen, just before the color turns black, the reaction should be stopped.

6. After suitable color intensity is observed, stop the reaction by rinsing the slide in deionized water using a squirt bottle three times for 5 minutes each.

NOTE: Direct the stream of water on the slide and not the tissue.

7. Counterstain, if desired, with Eosin, KPL Contrast Green or other appropriate counterstain for 30 - 60 seconds.

8. Rinse with deionized water for 1 minute.
9. Dehydrate through graded ethanol for 3 minutes each in 20%, 40%, 80% and 100% EtOH.

NOTE: Floating sections or whole mounts may be fixed to slides by drying under low heat followed by a 1 minute rinse in 95% ethanol.

10. Place the sample into two washes of xylene or a xylene substitute, for 1 minute each.
11. Air dry thoroughly.
12. Mount slides in an organic mounting media.

PRODUCT SAFETY AND HANDLING

See SDS (Material Safety Data Sheet) for this product.

RELATED PRODUCTS

CAT. NO.

KPL Silver Enhancer Kit for Membrane Applications	5450-0012 (50-22-02)
KPL Contrast Green	5540-0003 (71-00-11)

TROUBLESHOOTING GUIDE

Problem	Possible Cause	Corrective Measure
Excessive Development and /or Background	Silver enhancer incubation time too long.	Shorten/optimize silver enhancer incubation time.
Floating Precipitate	Excess antibody; reaction too fast. Silver enhancer incubation time too long.	Dilute primary antibody and/or gold conjugate. Optimize silver enhancer time.
Purple or Other Color	Excess counterstain.	Shorten counterstain incubation time.

REFERENCES

1. Danscher, G., Hacker, G., et. al., *J. Histotechnology*, 16(3):201-207, 1993.
2. Hacker, G., Grimelius, L., et. al., *J. Histotechnology*, 11(4):213-221, 1988.
3. Holgate, C., Jackson, P., Cowen, P., and Bird, C., *J. Histo/Cytochemistry*, 31(7):938-944, 1983.
4. Danscher, G., *Histochemistry*, 71:1-16, 1981.

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.