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Part 3651
Revised January 2025

CK5/14 + p63 + P504S Control Slides – Technical Memo

CONTROL SLIDES:

Part 3651A	**Part 3651B**
10 Slide/Set	98 Slide/Set

PRODUCT SPECIFICATIONS:
Tissue: CK5/14 + p63 + P504S positive staining prostate and negative staining myometrium.
Fixation: Formalin 10%, Phosphate Buffered (Part 1090).
Section/Glass: Paraffin sections cut at 4 microns on Superfrost™ Plus slides.
Quality Control Stain: CK5/14 + p63 + P504S quality control stained slide(s) included.
Reactivity: Guaranteed product specific reactivity for six months from date of receipt. Revalidate after six months to verify continued reactivity.
Storage: 15-30°C in a light deprived and humidity controlled environment.
Intended Use: To verify histological techniques and reagent reactivity.

Before using unstained control slides, review the enclosed stained slide(s) to ensure that this tissue source is acceptable for testing needs.

APPLICATION:

Newcomer Supply CK5/14 + p63 + P504S Control Slides provide a useful combination of markers helpful in diagnosing prostatic intraepithelial neoplasia (PIN). For ease of screening, CK5/14 + p63 + P504S positive staining is in a single piece of prostate tissue.

NEWCOMER SUPPLY VALIDATION PROCEDURE:

1. Heat dry sections in oven according to your laboratory protocol.
2. Deparaffinize sections thoroughly in three changes of xylene, 3 minutes each. Hydrate through two changes each of 100% and 95% ethyl alcohols, 10 dips each. Wash well with distilled water.
    a. *See Procedure Note #1.*
3. Proceed with an epitope/antigen retrieval technique approved for use in your laboratory.
4. Rinse in distilled water; tap off excess water.
5. Circle sections with Pap Pen Liquid Blocker (Part 6505, 6506 or 6507) to reduce reagent usage and ensure tissue coverage.
6. Block endogenous peroxidase with freshly made 3% Hydrogen Peroxide. Incubate for 5 minutes.
    a. *See Procedure Note #2.*
7. Wash slides gently in distilled water. Rinse in two changes of Tris Buffered Saline.
    a. *See Procedure Note #3.*
8. Tap off excess buffer; apply CK5/14 + p63 + P504S primary antibody. Incubate at room temperature for 30 minutes.
9. Rinse slides in two changes of buffer.
10. Tap off excess buffer; apply MACH 2 Double Stain 2 Polymer. Incubate for 20 minutes.
11. Rinse slides in two changes of buffer.
12. Prepare required quantity of DAB substrate/chromogen.
13. Tap off excess buffer; apply DAB. Incubate for 5 minutes.
14. Rinse slides in two changes of buffer.
15. Prepare required quantity of Vulcan Fast Red Chromogen.
16. Tap off excess buffer; apply Vulcan Fast Red. Incubate for 10 minutes.
17. Rinse slides in four changes of distilled water.
18. Counterstain with Hematoxylin Stain, Gill I (Part 1180); 1-10 dips.
19. Rinse slides in warm tap water to blue sections.
20. Air-dry slides. Dip dried slides in xylene; coverslip with compatible mounting medium.

RESULTS:

P504S positive expression	Red granular cytoplasmic staining
CK5/14 positive expression	Brown cytoplasmic staining
p63 positive expression	Brown nuclear staining
Myometrium	Negative

PROCEDURE NOTES:

1. Do not allow sections to dry out at any point during procedure.
2. Dilute Hydrogen Peroxide 30%, Aqueous (Part 1206) with distilled water to a 3% (1/10) solution prior to use.
3. Dilute Tris Buffered Saline 0.05M, pH 7.6, 10X (Part 140304) with distilled water to a 1/10 solution prior to use for all buffer rinses.
4. Biocare CK5/14 + p63 + P504S Cocktail is the primary antibody used along with Biocare detection and ancillary reagents.
5. If using a xylene substitute, follow manufacturer's recommendation for deparaffinization and clearing steps.

REFERENCES:

1. Biocare CK5/14 + p63 + P504S datasheet.
2. Modifications developed by Newcomer Supply Laboratory.