

Rev: A Release Date: 03/13/2014 IVD

p63- 4A4

Clone	4A4
Source	Rabbit Monoclonal
Cat #	PM105-6ml RTU PM105-3ml RTU CM105-0.1ml Conc CM105-0.5ml Conc
Regulatory Status	IVD

## Intended Use:

This antibody is intended for use to qualitatively

identify p63 by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

## Summary and Explanation:

The p63 protein is a member of the p53 family, which also includes p73. At least 6 different transcripts of *p63* derives from alternative splicing events and encodes proteins with two different N termini (TA and  $\Delta$ N) and three different C termini ( $\alpha$ ,  $\beta$  and  $\gamma$ ). The protein isotypes TAp63 $\alpha$ , TAp63 $\beta$ , and TAp63 $\gamma$  contain the N-terminal transactivation (TA) domain, whereas the other three isotypes  $\Delta$ Np63 $\alpha$ ,  $\Delta$ Np63 $\beta$ , and  $\Delta$ Np63 $\gamma$ , lack this domain, and when present in sufficient concentration act in a dominant-negative manner with respect to wild-type p63 and p53 protein.

p63 is detected in prostate basal cells in normal prostate glands and PIN. However, it is negative in prostate adenocarcinoma. Thus p63 is useful as a differential marker for benign prostate glands and adenocarcinoma (negative marker). The combination of AMACR, 34βE12, and p63 may be useful for diagnosing PIN and small focus adenocarcinoma, especially in difficult cases and cases with limited tissues.

Immunogen: A recombinant protein derived from amino acid 1-205 of human p63.

**Isotype:** Mouse IgG2a/κ

## **Reagent Provided:**

**Concentrated format:** Antibody to p63 is diluted in antibody diluent, with 1% bovine serum albumin (BSA) and 0.05% sodium azide (NaN3). Recommended dilutions: 1:50 – 1:100. The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by individual laboratory.

**Pre-diluted format:** PathnSitu ready to use antibodies are pre tittered to optimal staining conditions. Further dilution may loose the activity and may yield to sub optimal staining.

Storage Recommendations: Store at 2°-8°C. Do not use after expiration date provided on the vial.

Staining Recommendations:

- Antigen Retrieval Solution: Use EDTA Buffer(PathnSitu Cat # PS008) as antigen retrieval solution Heat Retrieval Method: Retrieve sections under steam pressure for 15 min using PathnSitu's MERS (Multi Epitope Retrieval System) then allow solution to cool for 10 minutes then transfer tissue sections/slides to distilled water.

   Drimmers Antihology
   Covers the tissue sections with primers antihols and insulate for 20
  - Primary Antibody:Cover the tissue sections with primary antibody and incubate for 30<br/>min at room temperature when used PathnSitu PolyExcel Detection<br/>System.
  - Detection System:Refer to PathnSitu PolyExcel detection system protocol or manufacturer's<br/>detection kit staining protocol when used other vendor detection system.

Cellular Localization: Nuclear

- Positive Control: Prostrate, Squamous cell carcinoma.
- Troubleshooting:Follow the antibody specific protocol recommendations according to data sheet<br/>provided. If unusual results occur, contact PathnSitu Technical Support at 040-<br/>2701 5544 or techsupport@pathnsitu.com.
- Limitations and Warranty: There are no warranties, expressed or implied, which extend beyond this description. PathnSitu is not liable for property damage, personal injury, or economic loss caused by this product.
- Bibliography:
  1. Yang A, Kaghad M, Wang Y, Gillett E, Fleming MD, Dötsch V, et al. *p63*, a *p53* homolog at 3q27-29, encodes multiple products with transactivating, death-inducing, and dominant-negative activities. Mol Cell 1998;2:305-16.
  2. Marin MC, Kaelin WG. p63 and p73: old members of a new family [minireview]. BiochimBiophysActa 2000;1470:M93-M100.
  3. Jetten AM, Harvat BL. Epidermal differentiation and squamous metaplasia: from stem cell to cell death. J Dermatol 1997;24:711-25.
  4. Yang A, Schweitzer R, Sun D, Kaghad M, Walker N, Bronson RT, et al. p63 is essential for regenerative proliferation in limb, craniofacial and epithelial development. Nature 1999;398:714-18.