



p63

IHC of p63 on an FFPE Prostate Tissue

Description In addition to p53, mammalian cells contain two homologous genes, p63 and p73. These genes give rise to the expression of proteins that are highly similar to p53 in structure and function. In particular, p63 and p73 proteins can induce p53-responsive genes and elicit programmed cell death. p73 and p63 are more important during development and differentiation. In particular, p63 appears to be primarily implicated in epithelial development.

Anti-p63 to human p63 protein labels an epitope common to all six p63 isotypes (TAp63 α , TAp63 β , TAp63 γ , Δ Np63 α , Δ Np63 β , Δ Np63 γ). p63 labels the nuclei of myoepithelial cells in the prostate gland as well as breast tissue, making it useful in differentiating benign vs. malignant prostate lesions and breast lesions.

Antibody Type	Mouse Monoclonal	Clone	4A4
Isotype	IgG2a/K	Reactivity	Paraffin, Frozen
Localization	Nuclear	Control	Normal Prostate, Breast
Storage	Store at 2°-8°C	Stability	2 years

For long-term storage of the concentrated antibody, it is recommended that aliquots of the antibody be frozen at -20°C in glycerol 50% (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Dilute using an antibody diluent such as ImmunoDetector Protein Block/Antibody Diluent (BSB 0040 and BSB 0041) or ImmunoDNA Background Blocker (BSB 0103-BSB 0107).

Presentation p63 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Availability	Catalog No.	Antibody Type	Dilution	Volume/QTY
	BSB 5848	Prediluted	Ready-To-Use	3.0 ml
	BSB 5849	Prediluted	Ready-To-Use	7.0 ml
	BSB 5850	Prediluted	Ready-To-Use	15.0 ml
	BSB 5851	Concentrated	1:100-1:500	0.1 ml
	BSB 5852	Concentrated	1:100-1:500	0.5 ml
	BSB 5853	Concentrated	1:100-1:500	1.0 ml
	BSB 5854-1	Control Slides		5

Note: For concentrated antibodies, please centrifuge prior to use to ensure recovery of all product.

- References**
1. Yang A, et al. *Mol Cell*. 1998;2:305-16
 2. Signoretti S, et al. *Am J Pathol*. 2000;157:1769-75
 3. Yang A, et al. *Nature*. 1999;398:714-18
 4. Barbareschi M, et al. *Am J Surg Pathol*. 2001;Aug;25(8):1054-60
 5. Werling RW, et al. *Am J Surg Pathol*. 2003;Jan;27(1):82-90
 6. Rajal B Shah, et al. *Am J Surg Pathol*. 2002;26(9):1161-1168
 7. Di Como CJ, et al. *Clinical Cancer Research*. 2002;Vol.8:494-501
 8. Weinstein MH, et al. *Mod Pathol*. 2002;Dec;15(12):1302-8

Protocol Suggested protocol on reverse

Recommended Immunohistochemical Protocol

- Pretreatment**
1. Cut and mount 3-4 micron formalin-fixed paraffin-embedded tissues on positive charged slides.
 2. Air dry for 2 hours at 58° C.
 3. Deparaffinize, dehydrate and rehydrate tissues.
 4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as **ImmunoDNA Retriever with Citrate** (BSB 0020-BSB 0023) or **EDTA** (BSB 0030-BSB 0033).
 5. Any of three heating methods may be used:
 - a. **Electric Pressure Cooker**
Place standoff rack at base of pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high, and incubate for 15 minutes. Open and immediately transfer slides to room temperature.
 - b. **Water Bath Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a water bath set at 95°-99° C. Incubate for 30-60 minutes.
 - c. **Conventional Steamer Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a Steamer, cover and steam for 30-60 minutes.
 6. After heat treatment, transfer slides in **ImmunoDNA Retriever with Citrate** or **EDTA** to room temperature and let stand for 15-20 minutes.
 7. Wash slides with IHC wash buffer or DI water.
 8. Continue IHC staining protocol.

Immunohistochemical Protocol

Step	ImmunoDetector (AP or HRP)	PolyDetector (AP or HRP)
Peroxidase/AP Block	5 minutes	5 minutes
Primary Antibody	30 minutes	45 minutes
Secondary Biotinylated Link	10 minutes	Not Applicable
AP or HRP Label	10 minutes	45 minutes
Substrate-Chromogen	5-10 minutes	10 minutes
Counterstaining	Time varies with counterstain	Time varies with counterstain

