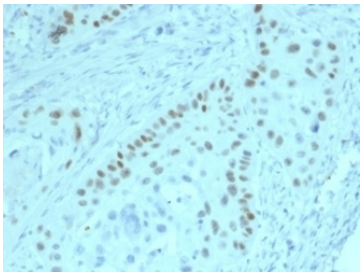
p63 Antibody / Prostate Epithelial Integrity Marker Antibody [clone PCRP-TP63-2G3] (V9376)

Catalog No.	Formulation	Size
V9376-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9376-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9376SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	PCRP-TP63-2G3
Purity	Protein A/G affinity
UniProt	Q9H3D4
Localization	Nucleus, Cytoplasm
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This p63 antibody is available for research use only.



p63 Antibody. Immunohistochemistry analysis of Tumor protein 63 (TP63) in FFPE human prostate tissue using a p63 antibody as a prostate epithelial integrity marker (clone PCRP-TP63-2G3) demonstrates strong HRP-DAB brown nuclear staining in basal epithelial cells forming a continuous layer along glandular structures. Luminal epithelial cells remain negative, creating a clear contrast that reflects intact epithelial organization. The uniform basal nuclear staining highlights preserved glandular architecture and supports assessment of epithelial integrity within the tissue. The nuclear-restricted signal with low background enables confident identification of TP63-positive basal cells and clear delineation of epithelial compartments. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.

Description

Tumor protein 63 (TP63) is a nuclear transcription factor of the p53 family that plays a critical role in maintaining epithelial structure and basal cell identity within the prostate. p63 Antibody is widely used as a prostate epithelial integrity marker antibody for assessing the structural organization of prostate glands, where nuclear TP63 expression reflects the presence of intact basal cell layers and stable epithelial architecture.

p63 antibody, also known as TP63 antibody or Tumor protein 63 antibody in the literature, is selectively expressed in basal epithelial cells of normal and benign prostate tissue. As a prostate epithelial integrity marker antibody, p63 produces nuclear staining that directly corresponds to the presence of a continuous basal cell layer, which is essential for maintaining glandular structure and function.

The epithelial integrity differentiator is particularly relevant in immunohistochemistry because preservation or disruption of glandular architecture is a defining feature of prostate tissue analysis. p63 Antibody enables visualization of basal cell continuity, allowing researchers to assess whether epithelial structures remain intact or have undergone structural alteration. Continuous nuclear staining indicates preserved integrity, while fragmented or absent staining suggests disruption of basal cell architecture.

Loss of TP63-positive basal cells is commonly associated with prostate adenocarcinoma, where malignant glands lack the organized basal layer seen in benign tissue. The absence of nuclear staining in these regions provides a clear indicator of compromised epithelial integrity and reflects underlying changes in tissue organization and cellular differentiation.

TP63 isoforms, particularly deltaNp63, contribute to maintenance of epithelial stability by regulating proliferation and differentiation in basal cells. Nuclear localization of p63 reflects its role in preserving tissue architecture and supporting epithelial homeostasis within the prostate.

In research applications, p63 Antibody provides a reliable tool for evaluating epithelial integrity, distinguishing intact from disrupted glandular structures, and studying TP63-associated changes in tissue organization. The nuclear staining pattern allows direct correlation between molecular expression and histological structure.

p63 Antibody as a prostate epithelial integrity marker antibody is particularly useful for assessing structural changes during disease progression, identifying regions of epithelial disruption, and understanding the relationship between TP63 expression and glandular organization. Tumor protein 63 antibody therefore supports detailed analysis of prostate tissue integrity, epithelial biology, and disease-associated alterations.

Application Notes

Optimal dilution of the p63 Antibody / Prostate Epithelial Integrity Marker Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human TP63 protein was used as the immunogen for the p63 Antibody / Prostate Epithelial Integrity Marker Antibody.

Storage

Aliquot the p63 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

p63 epithelial integrity antibody, TP63 prostate epithelium marker antibody, Tumor protein 63 tissue integrity antibody,

p63 epithelial structure antibody