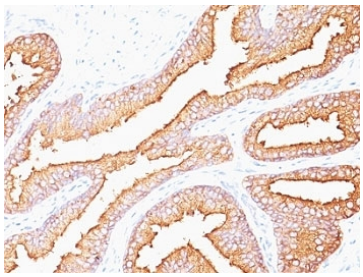
PSA Antibody Mouse Monoclonal for IHC / Prostate Specific Antigen IHC Antibody [clone SPM352] (V9033)

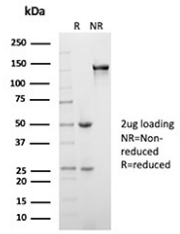
Catalog No.	Formulation	Size
V9033-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9033-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V9033SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V9033IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM352
Purity	Protein G affinity chromatography
UniProt	P07288
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This PSA antibody is available for research use only.



PSA Antibody Mouse Monoclonal for IHC (clone SPM352) immunohistochemistry of human prostate carcinoma. IHC analysis of FFPE human prostate carcinoma tissue using PSA Antibody Mouse Monoclonal for IHC (clone SPM352) shows strong HRP-DAB brown cytoplasmic staining in malignant prostate epithelial cells lining irregular glandular lumina, consistent with Prostate specific antigen (KLK3) expression in prostate-derived tumor epithelium, while surrounding stromal cells remain largely negative. Antigen retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9 for 10-20 minutes followed by cooling at room temperature for 20 minutes before testing.



SDS-PAGE analysis of purified, BSA-free recombinant PSA/Prostate Specific Antigen antibody (clone SPM352) as confirmation of integrity and purity.

Description

Prostate specific antigen (KLK3) is a secreted serine protease encoded by the KLK3 gene and produced primarily by luminal epithelial cells of the prostate gland. The protein is widely known as Prostate specific antigen or PSA and is a member of the kallikrein related peptidase family of serine proteases. PSA Antibody Mouse Monoclonal for IHC (clone SPM352) recognizes the KLK3 protein and is designed for studies examining PSA expression in prostate tissues and prostate cancer using immunohistochemistry.

PSA is synthesized as a precursor enzyme that undergoes signal peptide removal and proteolytic activation during secretion from prostate epithelial cells. The mature protease is released into the lumen of prostatic glands where it functions in seminal plasma. PSA cleaves semenogelin proteins and other seminal components to liquefy the seminal coagulum following ejaculation, a process that contributes to normal reproductive physiology.

In normal prostate tissue, KLK3 expression is largely restricted to luminal epithelial cells lining prostatic acini and ducts. Immunohistochemical staining typically demonstrates strong cytoplasmic staining within these epithelial cells and may also highlight luminal secretions where PSA accumulates. Basal cells and surrounding stromal elements generally show little or no staining, creating a characteristic epithelial staining pattern in prostate tissue sections.

PSA expression is commonly retained in prostate adenocarcinoma and in metastatic tumors derived from prostate tissue. Immunohistochemistry detection of Prostate specific antigen therefore provides a valuable approach for identifying prostate epithelial origin in tumor specimens and for studying prostate cancer differentiation. In prostate carcinoma tissues, PSA staining is typically observed within the cytoplasm of malignant glandular epithelial cells that form tumor glands.

PSA Antibody Mouse Monoclonal for IHC (clone SPM352) provides a reagent for detecting KLK3 protein in formalin-fixed, paraffin-embedded tissue sections. Monoclonal antibodies recognize a defined epitope within the PSA protein, allowing consistent antigen recognition and supporting immunohistochemistry studies investigating prostate epithelial differentiation and prostate tumor biology.

For a complementary recombinant clone with broader application validation, see our Prostate Specific Antigen Antibody RM323 / KLK3 Antibody page.

Application Notes

The optimal dilution of the PSA Antibody Mouse Monoclonal for IHC for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Prostate specific antigen from human sperm plasma was used as the immunogen for this PSA antibody.

Storage

Store the PSA antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Prostate specific antigen antibody, KLK3 antibody, PSA antibody, Kallikrein related peptidase 3 antibody

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