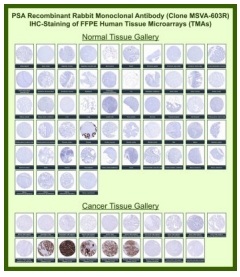
PSA Antibody for IHC / KLK3 Immunohistochemistry Antibody [clone MSVA-603R] (V6089)

Catalog No.	Formulation	Size
V6089-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6089-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-603R
UniProt	P07288
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This PSA Antibody for IHC / KLK3 Immunohistochemistry Antibody is available for research use only.



PSA Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Prostate specific antigen / KLK3 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using rabbit monoclonal antibody clone MSVA-603R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong cytoplasmic and luminal localization in prostate epithelial cells of normal prostate tissue, while most other normal tissues show minimal to absent staining. Within tumor tissue microarrays, strong PSA expression is observed in prostate adenocarcinoma, whereas non-prostatic tumors are largely negative. Evaluation across large TMA panels enables direct comparison of KLK3 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported PSA expression profiles in the Human Protein Atlas and support its use as a marker of prostatic epithelial differentiation.

Description

Prostate specific antigen (PSA), encoded by the KLK3 gene, is a secreted serine protease produced primarily by luminal

epithelial cells of the prostate gland. PSA belongs to the kallikrein related peptidase family and is commonly referred to as kallikrein related peptidase 3. PSA Antibody for IHC is widely used for immunohistochemistry detection of Prostate specific antigen in formalin-fixed paraffin-embedded tissues and is an established marker for identifying prostatic epithelial cells and tumors of prostatic origin.

Immunohistochemistry staining for PSA typically demonstrates strong cytoplasmic and luminal signal in prostate glandular epithelial cells, reflecting the secretory nature of the PSA protein. In benign prostate tissue, PSA staining highlights the luminal epithelial layer of prostatic glands while surrounding stromal cells remain negative. This distinct staining pattern allows clear visualization of prostate gland architecture in FFPE tissue sections.

PSA expression is frequently retained in prostate adenocarcinoma, making PSA immunohistochemistry a widely used marker for confirming prostatic lineage in tumor samples. Strong cytoplasmic staining is commonly observed in primary prostate carcinoma as well as metastatic prostate cancer involving lymph node, bone, or other distant tissues. Detection of PSA by immunohistochemistry therefore plays an important role in distinguishing metastatic prostate carcinoma from morphologically similar tumors arising in other organs.

Because PSA expression is highly restricted to prostate epithelial cells, immunohistochemistry analysis using PSA antibodies typically shows minimal staining in non-prostatic tissues. This high tissue specificity makes PSA one of the most widely used markers in prostate pathology and tumor classification studies. Evaluation of PSA staining patterns in tissue microarrays and clinical tumor samples helps researchers investigate prostate tumor differentiation, metastasis, and prostate epithelial biology.

A PSA Antibody for IHC such as clone MSVA-603R provides a recombinant rabbit monoclonal reagent optimized for immunohistochemistry detection of Prostate specific antigen in FFPE tissue sections. Immunohistochemistry staining typically reveals strong cytoplasmic and luminal PSA signal in prostate epithelial cells and prostate adenocarcinoma cells, supporting research applications focused on prostate tissue identification and tumor origin analysis.

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

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the PSA Antibody for IHC / KLK3 Immunohistochemistry Antibody should be determined by the researcher.

2. This KLK3/Kallikrein related peptidase 3 antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment (around amino acids 150-250) of human KLK3 protein (exact sequence is proprietary) was used as the immunogen for the PSA Antibody for IHC antibody.

Storage

PSA Antibody for IHC with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

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

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