SLC45A3 Antibody for IHC / Prostein Immunohistochemistry Antibody [clone MSVA-460R] (V6136)

Catalog No.	Formulation	Size
V6136-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6136-20UG	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-460R
UniProt	Q96JT2
Localization	Membrane
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This SLC45A3/Prostein antibody is available for research use only.



SLC45A3 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Solute carrier family 45 member 3 SLC45A3, also known as Prostein, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal SLC45A3 antibody clone MSVA-460R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong cytoplasmic and perinuclear localization in prostate glandular epithelial cells, consistent with Golgi-associated distribution of Prostein, while most non-prostatic tissues remain largely negative. Within tumor tissue microarrays, prostate adenocarcinoma samples show preserved epithelial staining patterns, supporting its use as a prostate lineage marker. Evaluation across large TMA panels enables direct comparison of SLC45A3 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported SLC45A3 expression profiles in the Human Protein Atlas.

Description

Solute carrier family 45 member 3 (SLC45A3) is a prostate-specific protein encoded by the SLC45A3 gene and localized primarily to the Golgi apparatus in secretory epithelial cells. SLC45A3 Antibody for IHC is optimized for

immunohistochemistry detection of Prostein in formalin-fixed, paraffin-embedded tissues, where it produces a distinct cytoplasmic and perinuclear staining pattern that reflects Golgi-associated localization in prostate epithelium. Clone MSVA-460R is a recombinant rabbit monoclonal antibody designed to provide consistent and high-contrast staining in tissue sections, supporting clear interpretation of epithelial cell morphology.

SLC45A3 antibody, also referred to as Prostein antibody or prostate-specific androgen-regulated protein antibody, shows highly restricted expression in prostate tissue, with strong labeling of luminal epithelial cells and minimal background in non-prostatic tissues. This tissue specificity makes SLC45A3 Antibody for IHC particularly valuable for distinguishing prostate-derived cells in complex tissue environments, including tumor samples and metastatic lesions where tissue origin must be resolved with confidence.

In immunohistochemistry workflows, SLC45A3 Antibody for IHC demonstrates robust and reproducible staining across human tissue microarray panels, including large-scale TMA studies and multi-tissue arrays containing diverse normal and cancer specimens. Within TMA sections, staining is consistently observed in prostate epithelial compartments while remaining absent or very low in unrelated tissues, reinforcing its role as a prostate-restricted marker. The ability to generate clean, interpretable staining across tissue microarrays enhances its utility in comparative studies, biomarker validation, and high-throughput tissue screening approaches.

The SLC45A3 protein belongs to the solute carrier family and is associated with intracellular transport processes within the secretory pathway. Its Golgi localization is supported by co-localization with Golgi-resident proteins, and its function is linked to protein trafficking and processing in highly secretory epithelial cells. This biological context explains the characteristic perinuclear staining pattern observed in immunohistochemistry, which aligns with known Golgi distribution in prostate epithelial cells.

SLC45A3 Antibody for IHC enables detailed visualization of prostate glandular architecture, including luminal epithelial layers and tumor-associated epithelial cells. In prostate cancer tissues, staining highlights epithelial cell populations with preserved cytoplasmic and perinuclear localization, supporting interpretation of tumor differentiation and tissue origin. The reproducibility of staining across tissue microarrays, combined with strong prostate specificity, makes this antibody a powerful tool for research applications involving prostate biology, tumor classification, and epithelial marker analysis.

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 SLC45A3 Antibody for IHC / Prostein Immunohistochemistry Antibody should be determined by the researcher.

2. This SLC45A3/Prostein antibody is recombinantly produced by expression in CHO 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

Synthesized peptides to the N terminus of human SLC45A3 (prostein) protein were used as the immunogen for the SLC45A3 Antibody for IHC / Prostein Immunohistochemistry Antibody.

Storage

SLC45A3/Prostein antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

Prostein antibody, SLC45A3 antibody, Prostein IHC antibody, SLC45A3 immunohistochemistry antibody, Prostate epithelial marker antibody

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