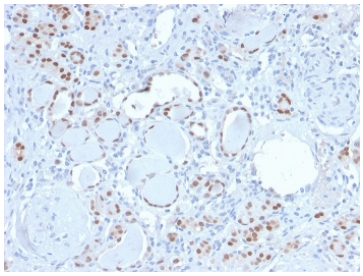
PAX8 Antibody / Renal Epithelial Lineage Marker Antibody [clone PAX8/3688R] (V8602)

Catalog No.	Formulation	Size
V8602-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8602-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8602SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

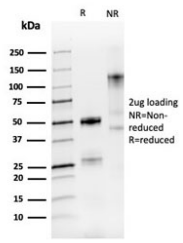
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	PAX8/3688R
Purity	Protein A affinity chromatography
UniProt	Q06710
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant PAX8 antibody is available for research use only.



PAX8 Antibody / Renal Epithelial Lineage Marker Antibody immunohistochemistry in human kidney tissue showing nuclear HRP-DAB brown staining in renal tubular epithelial cells. Paired box protein Pax-8 (PAX8) expression is localized to nuclei lining nephron tubules, with clear staining of epithelial cells forming tubular structures and minimal signal in surrounding stromal or interstitial compartments. The staining pattern highlights renal epithelial lineage specificity, with strong nuclear positivity in tubular epithelium and absence of staining in non-epithelial cells. This distribution supports the use of PAX8 as a renal lineage marker in tissue-based analysis. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free PAX8 Antibody / Renal Epithelial Lineage Marker Antibody as confirmation of integrity and purity.

Description

Paired box protein Pax-8 (PAX8) is a nuclear transcription factor encoded by the PAX8 gene that plays a fundamental role in kidney development and epithelial lineage specification within the nephron. As a member of the paired box (PAX) family, PAX8 regulates transcriptional programs that drive differentiation of renal tubular epithelial cells and maintain their specialized functions. PAX8 antibody is widely used as a marker of renal epithelial lineage due to its strong nuclear expression in kidney tissue.

PAX8 antibody, also referred to as Paired box protein Pax-8 antibody or Pax-8 transcription factor antibody, is prominently expressed in renal tubular epithelial cells across multiple segments of the nephron. This PAX8 Antibody is uniquely positioned for studies focused on renal epithelial identity, enabling clear visualization of kidney-derived cells within both normal tissue and tumor specimens. Nuclear localization reflects the transcriptional activity of PAX8 in regulating genes associated with epithelial differentiation and tubular organization.

During kidney development, PAX8 contributes to nephrogenesis by promoting differentiation of epithelial precursors and supporting formation of functional tubular structures. In adult tissues, its continued expression helps maintain epithelial integrity and cellular specialization within the nephron. These roles make PAX8 a key regulator of renal epithelial stability and function.

Functionally, PAX8 participates in pathways that preserve epithelial phenotype and prevent dedifferentiation. Its activity supports cell survival and structural organization within renal tissue, ensuring proper physiological function. Alterations in PAX8 expression can impact epithelial identity and are relevant in both developmental disorders and cancer.

In oncology, PAX8 expression is retained in a wide range of renal cell carcinomas, including clear cell, papillary, and chromophobe subtypes. Nuclear staining of PAX8 is frequently used to confirm renal origin, particularly in metastatic tumors where tissue lineage must be established. Its absence in most non-renal tumors enhances its diagnostic value as a lineage-specific marker.

PAX8 Antibody therefore serves as a powerful tool for identifying renal epithelial cells and studying kidney-specific transcriptional regulation. Its strong nuclear staining pattern and lineage restriction support research in nephrology, developmental biology, and cancer, providing a reliable means of assessing epithelial identity within renal tissues and tumors.

Application Notes

Optimal dilution of the PAX8 Antibody / Renal Epithelial Lineage Marker Antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to the C-terminus of the human protein was used as the immunogen for the recombinant PAX8 Antibody / Renal Epithelial Lineage Marker Antibody.

Storage

Store the recombinant PAX8 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

PAX8 renal marker antibody, Paired box protein Pax-8 kidney epithelial antibody, PAX8 renal tubular marker antibody, Pax-8 kidney lineage antibody, PAX8 nephron epithelial antibody

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