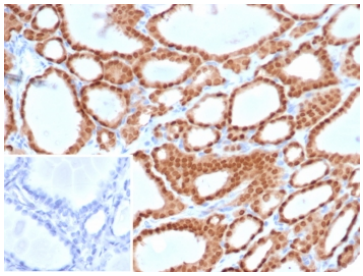
Paired box protein Pax-8 Antibody / PAX8 Antibody [clone PAX8/6848R] (V4909)

Catalog No.	Formulation	Size
V4909-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4909-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4909SAF-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, kappa
Clone Name	PAX8/6848R
Purity	Protein A/G affinity
UniProt	Q06710
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Paired box protein Pax-8 antibody is available for research use only.



Paired box protein Pax-8 Antibody / PAX8 Antibody immunohistochemistry in human thyroid tissue showing strong nuclear HRP-DAB brown staining in follicular epithelial cells. Paired box protein Pax-8 (PAX8) expression is localized to nuclei lining thyroid follicles, with uniform nuclear positivity surrounding colloid-filled lumina and clear preservation of follicular architecture. The staining is confined to epithelial cell nuclei with minimal signal in stromal compartments, while colloid remains unstained. The nuclear pattern is consistent with transcription factor localization and highlights active epithelial lineage cells. Inset: negative control using PBS in place of primary antibody shows absence of specific staining. 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

Paired box protein Pax-8 (PAX8) is a nuclear transcription factor encoded by the PAX8 gene and a member of the paired box (PAX) family, functioning as a key regulator of epithelial lineage identity in thyroid, renal, and Mullerian-derived tissues. It controls transcriptional programs that define cellular differentiation, maintain tissue-specific phenotypes, and support long-term epithelial stability. Paired box protein Pax-8 Antibody is widely used to detect nuclear PAX8 expression in studies focused on epithelial biology and transcriptional regulation.

PAX8 antibody, also known as Paired box protein Pax-8 antibody or Pax-8 transcription factor antibody, is strongly associated with lineage-defining transcriptional activity. This Paired box protein Pax-8 Antibody is uniquely positioned for detecting nuclear transcription factor expression across multiple epithelial tissues, enabling identification of cells maintaining lineage-specific gene expression programs. Its nuclear localization reflects direct engagement with DNA and transcriptional machinery.

Functionally, PAX8 binds DNA through its conserved paired box domain and regulates genes involved in differentiation, proliferation, and epithelial organization. It interacts with co-regulators and other transcription factors to coordinate gene expression networks that maintain cellular identity. These interactions are essential for preserving tissue structure and function across thyroid, renal, and reproductive systems.

PAX8 plays a central role in both development and maintenance of epithelial tissues. During organogenesis, it drives lineage specification, while in adult tissues it sustains differentiated states through continued transcriptional regulation. Its persistent expression highlights its importance as a marker of lineage identity and transcriptional stability.

The recombinant rabbit monoclonal antibody clone PAX8/6848R provides high affinity and reproducibility for detecting PAX8 in research applications. Its monoclonal nature supports consistent recognition of the target protein, enabling reliable comparison across experiments and sample types. This is particularly important in studies where precise nuclear localization and signal clarity are required for interpretation.

Paired box protein Pax-8 Antibody therefore provides a robust tool for investigating epithelial lineage identity and transcriptional regulation. Its strong nuclear staining pattern and central role in gene expression control make it highly valuable for studies of differentiation, tissue maintenance, and transcription factor biology across multiple epithelial systems.

Application Notes

Optimal dilution of the Paired box protein Pax-8 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 150-300) from the human protein was used as the immunogen for the Paired box protein Pax-8 antibody.

Storage

Aliquot the Paired box protein Pax-8 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

PAX8 recombinant rabbit monoclonal antibody, Paired box protein Pax-8 antibody, Pax-8 nuclear transcription factor antibody, PAX8 epithelial lineage marker antibody, PAX8 transcription regulator antibody