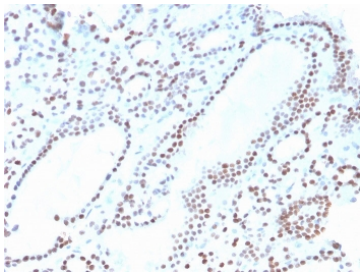
PAX8 Antibody Clone ZR-1 / Paired Box Protein Pax-8 Antibody [clone ZR-1] (V8603)

Catalog No.	Formulation	Size
V8603-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8603-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8603SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

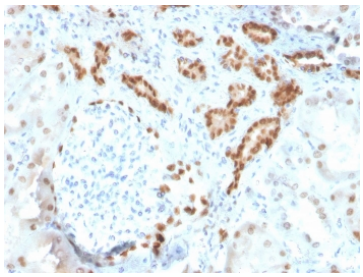
Recombinant RABBIT MONOCLONAL

Bulk quote request

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



PAX8 Antibody Clone ZR-1 / Paired Box Protein Pax-8 Antibody immunohistochemistry in human thyroid tissue showing strong nuclear staining in follicular epithelial cells. The recombinant rabbit monoclonal antibody clone ZR-1 highlights nuclear localization consistent with Paired box protein Pax-8 (PAX8) expression in thyroid follicles. Staining is concentrated in follicular cell nuclei surrounding colloid-filled lumina, with minimal background, supporting its role as a thyroid lineage marker in normal tissue architecture. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



PAX8 Antibody Clone ZR-1 / Paired Box Protein Pax-8 Antibody immunohistochemistry in human kidney tissue showing distinct nuclear staining in renal tubular epithelial cells. The recombinant rabbit monoclonal antibody clone ZR-1 demonstrates strong nuclear localization consistent with Paired box protein Pax-8 (PAX8) expression in renal epithelium. Staining is prominent in tubular structures, with nuclei of epithelial cells clearly highlighted while surrounding stromal elements remain largely negative, supporting its role as a renal lineage marker. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Paired box protein Pax-8 (PAX8) is a nuclear transcription factor belonging to the paired box (PAX) family, with essential roles in organ development and epithelial lineage specification, particularly in the thyroid, kidney, and Mullerian system. It functions within the nucleus to regulate transcriptional programs that control differentiation and tissue identity. PAX8 Antibody Clone ZR-1 is a recombinant rabbit monoclonal antibody developed to detect this lineage-defining transcription factor in biological samples.

PAX8 antibody, also known as Paired box protein Pax-8 antibody or PAX8 transcription factor antibody, recognizes a protein that is critical for thyroid follicular cell development and maintenance. In adult tissues, PAX8 expression is retained in thyroid epithelial cells, renal tubular epithelium, and Mullerian-derived tissues including fallopian tube and endometrium. This restricted distribution underpins its importance as a diagnostic marker in tumors such as thyroid carcinoma, renal cell carcinoma, and ovarian epithelial cancers, where nuclear PAX8 expression reflects tissue of origin.

PAX8 Antibody Clone ZR-1 is uniquely positioned for studies requiring recombinant monoclonal consistency combined with published validation support. Clone ZR-1 antibody has been referenced in peer-reviewed publications, supporting its use in research settings where reproducibility and literature-backed performance are important considerations. As a recombinant rabbit monoclonal antibody, it provides high affinity and specificity for detecting nuclear PAX8, enabling clear visualization of lineage-specific transcriptional activity across tissue types.

Structurally, PAX8 contains a conserved paired box DNA-binding domain that facilitates sequence-specific transcriptional regulation. It interacts with additional transcriptional regulators to control genes involved in epithelial differentiation, proliferation, and survival. PAX8 contributes to maintaining epithelial identity, and its expression is typically preserved in tumors that retain lineage characteristics. Rather than acting as a primary oncogenic driver, PAX8 is widely used as a marker of tumor origin due to its stable and lineage-restricted expression pattern.

PAX8 Antibody Clone ZR-1 provides a reliable reagent for detecting PAX8 expression in research applications focused on developmental biology, epithelial differentiation, and tumor classification. Its recombinant monoclonal design supports consistent performance across experiments, while its presence in published studies adds confidence for researchers seeking well-characterized reagents. This antibody is well suited for investigating nuclear transcription factor expression in tissues where lineage identification and epithelial context are critical.

Application Notes

Optimal dilution of the PAX8 Antibody Clone ZR-1 / Paired Box Protein Pax-8 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 Clone ZR-1 / Paired Box Protein Pax-8 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 recombinant rabbit monoclonal antibody, Paired box protein Pax-8 antibody, PAX8 nuclear transcription factor antibody, PAX8 clone ZR-1 antibody, Thyroid lineage marker PAX8 antibody