

Localization – Nucleus

Host Species – Rabbit

Ig Class – IgG

Intended Use

This antibody is designed for the specific localization of Pax8 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

Product Description

Paired box protein 8 (PAX8) is a transcription factor belonging to the PAX family, with critical roles in embryonic organogenesis of the kidney, thyroid, and paramesonephric ducts, ultimately contributing to the development of urogenital structures including the seminal vesicles, vas deferens, ureter, uterus, and fallopian tubes. Beyond its developmental functions, persistent expression of PAX8 in adult kidney, thyroid, breast, and seminal vesicle, ovarian, cervical, and endometrial epithelia suggests an additional role in the maintenance of epithelial homeostasis. Immunohistochemical studies demonstrate predominantly nuclear localization with minimal cytoplasmic staining. Due to its restricted distribution in normal tissues, PAX8 has emerged as a sensitive and specific immunohistochemical marker for primary and metastatic neoplasms arising from the aforementioned organs. PAX8 expression is consistently detected in clear cell, papillary, and chromophobe subtypes of renal cell carcinoma, as well as in endometrioid and serous ovarian carcinomas and in thyroid malignancies. However, its expression in lymphoid tissues remains a matter of controversy. Reports of PAX8 immunoreactivity in malignant lymphomas have been attributed to cross-reactivity of N-terminal polyclonal antibodies with PAX5, likely due to a high degree of sequence homology (~70%) in their N-terminal domains. Consequently, the diagnostic utility of PAX8 in hematolymphoid malignancies requires cautious interpretation.

Material Supplied

Pax8 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

Material required But Not Supplied

- Xylene
- Isopropyl alcohol
- Positive charged slides
- Wash Buffer
- DI Water
- Antigen retrieval buffers
- Blocking Reagents
- Detection System
- Control Tissues
- Hematoxylin
- Mounting media
- Cover glass

Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

Control Tissue	Thyroid tissue, Kidney	Antibody Incubation Time	30-60 Minutes at RT
Dilution factor	1:20-50 (Antibody Diluent: DH144)	Retrieval Pre-treatment	Tris-EDTA based HIER (AR9 Buffer: DH020)

Precautions

This product should be used by qualified and trained professional users only.

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

Troubleshooting

For Technical Support contact us at +91 - 7506501122 or info@dygnova.com or your local distributor to report unusual staining.

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	Manufacturer Details		Use by Date	LOT	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	REF	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	IVD	In-vitro Diagnostic Medical Device