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| --- | --- |
| Clone | ZR1 |
| Source | Rabbit Monoclonal |
| Cat # | PR114-6ml RTU PR114-3ml RTU  CR114-0.1ml Conc CR114- 0.5ml Conc HAR114-6ml RTU HAR114-3ml RTU |
| Regulatory Status | IVD |

PAX8 (ZR1)

**Intended Use:**

This antibody is intended for use to qualitatively identify PAX8 antigen by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient’s clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

**Summary and Explanation:**

PAX-8 is expressed in the thyroid (and associated carcinomas), non-ciliated mucosal cells of the fallopian tubes and simple ovarian inclusion cysts, but not normal ovarian surface epithelial cells. PAX-8 is expressed in a high percentage of ovarian serous, endometrioid, and clear cell carcinomas, but only rarely in primary ovarian mucinous adenocarcinomas. Studies have also found PAX-8 experession in renal tubules as well as renal carcinoma, nephroblastoma and seminoma. Over 98% of clear cell RCCs, 90% of papillary RCCs, and 95% of oncocytomas were positive for PAX-8, frequencies which are similar or better than for PAX-2. Similarly, the absence of expression of PAX-8 in breast and other non-GYN carcinomas other than those primary to the thyroid indicates that PAX-8 is an important new marker of ovarian cancer and a useful marker for the differential diagnoses in lung and neck tumors, or tumors at distant sites where primary lung carcinoma or thyroid carcinoma are possibilities. PAX-8, combined with organ system-specific markers such as uroplakin, mammaglobin, and TTF-1 can be a very useful panel to determine the primary site of invasive micropapillary carcinomas of ovary from bladder, lung, and breast. Unlike the polyclonal anti-PAX-8 antibody, the ZR1 rabbit monoclonal antibody does not react with pancreatic neuroendocrine tumors and thymic tumors.

**Immunogen:** Synthetic peptide corresponding to the C-terminus of Human PAX8 protein

**Isotype:** Rabbit IgG

**Reagent Provided:   
 Concentrated format:** Antibody to PAX8 is diluted in antibody diluent, with 1% bovine serum   
 albumin (BSA) and 0.05 sodium azide (NaN3). Recommended dilutions: 1:50 –   
 1:100.The antibody dilution and protocol may vary depending on the specimen   
 preparation and specific application. Optimal conditions should be   
 determined by individual laboratory.

**Pre-diluted format:** PathnSitu ready to use antibodies are pre tittered to optimal staining   
 conditions. Further dilution may loose the activity and may yield to sub   
 optimal staining.

**Storage Recommendations:** Store at 2°-8°C. Do not use after expiration date provided on the vial.

**Staining Recommendations:   
 Antigen Retrieval Solution:** Use **Tris- EDTA Buffer** **(PathnSitu Cat # PS009)** as antigen retrieval   
 solution Heat Retrieval Method: Retrieve sections under steam pressure   
 for **20 min** using PathnSitu’s MERS (Multi Epitope Retrieval System) then   
 allow solution to cool for 10 minutes then transfer tissue sections/slides to   
 distilled water.

**Primary Antibody:**  Cover the tissue sections with primary antibody and **incubate for 60  
 min** at room temperature when used PathnSitu PolyExcel Detection   
 System.

**Detection System:** Refer to PathnSitu PolyExcel detection system protocol or manufacturer’s detection kit staining protocol when used other vendor detection system.

**Cellular Localization:** Nuclear

**Positive Control:** Ovarian Ca

**Troubleshooting:** Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

**Limitations and Warranty:** There are no warranties, expressed or implied, which extend beyond this   
 description. PathnSitu is not liable for property damage, personal injury, or   
 economic loss caused by this product.

**Bibliography:**  1. Lotan TL, Ye H, Melamed J, Wu XR, Shih IM, Epstein JI.   
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