**PAX8**
Concentrated and Prediluted Polyclonal Antibody
901-379-103117

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>CP 379 AK, CK</th>
<th>PP 379 AA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>0.1, 1.0 ml, concentrated</td>
<td>6.0 ml, prediluted</td>
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<tr>
<td>Dilution:</td>
<td>1:200</td>
<td>Ready-to-use</td>
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<tr>
<td>Diluent:</td>
<td>Van Gogh Yellow</td>
<td>N/A</td>
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**Intended Use:**
For In Vitro Diagnostic Use
PAX8 is a rabbit polyclonal antibody that is intended for laboratory use in the qualitative identification of PAX8 protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient’s clinical history and other diagnostic tests by a qualified pathologist.

**Summary and Explanation:**
PAX8 is a member of the paired box (PAX) family of transcription factors. Members of this gene family typically encode proteins which contain a paired box domain, an octapeptide, and a paired-type homeodomain. This family plays critical roles during fetal development and cancer growth. PAX8 is involved in kidney cell differentiation, thyroid development, or thyroid dysgenesis. Studies show that expression of the PAX8 gene was found in 89% of analyzed tumor samples. The expression of the PAX8 target genes were found in all normal renal samples. PAX8 has been shown to be expressed in three of the most common types of renal cell carcinoma including clear cell, chromophobe and papillary carcinoma but negative for uroepithelial carcinoma of renal pelvis. PAX8 stains nuclei exclusively and performs well in formalin-fixed paraffin-embedded tissues. PAX8 has been shown to be a superior marker compared to the Renal Cell Carcinoma Marker (RCC).

**Principle of Procedure:**
Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, an enzyme labeled polymer is added to bind to the primary antibody. This detection of the bound antibody is evidenced by a colorimetric reaction.

**Source:** Rabbit polyclonal

**Species Reactivity:** Human, mouse and dog

**Clone:** N/A

**Isotype:** N/A

**Total Protein Concentration:** ~10 mg/ml. Call for lot specific Ig concentration.

**Epitope/Antigen:** PAX8

**Cellular Localization:** Nuclear

**Positive Tissue Control:** Renal tissue

**Known Applications:** Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

**Supplied As:** Buffer with protein carrier and preservative

**Van Gogh Yellow (PD902)**

**Storage and Stability:**
Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC.

**Protocol Recommendations Cont'd:**

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<tr>
<th>Peroxide Block:</th>
<th>Block for 5 minutes with Biocare's Peroxidized 1.</th>
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<tbody>
<tr>
<td>Pretreatment:</td>
<td>Perform heat retrieval using Biocare's Diva Decloaker. Refer to the Diva Decloaker data sheet for specific instructions.</td>
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</table>

**Limitations:**
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titer’s listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocol are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. The clinical interpretation of any positive or negative staining should be evaluated within the context of clinical presentation, morphology and other histopathological criteria by a qualified pathologist. The clinical interpretation of any positive or negative staining should be complemented by morphological studies using proper positive and negative internal and external controls as well as other diagnostic tests.

**Technical Note:**
This antibody has been standardized with Biocare's MACH 2 detection system. Use TBS buffer for washing steps.

**Quality Control:**

**Precautions:**
1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (4)
2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. (5)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.
Precautions Cont’d:

6. The SDS is available upon request and is located at http://biocare.net.

Troubleshooting:

Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare’s Technical Support at 1-800-542-2002.

References: