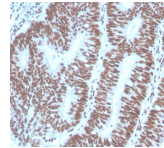


# PAX2 Monoclonal Mouse Antibody (PAX2/1104)



## Product Description

This antibody recognizes a protein of 42 kDa, which is identified as PAX2. It is a member of the paired box family of transcription factors, which is required for development and proliferation of the kidney, brain, and Müllerian organs. PAX2 genes contain a highly conserved DNA sequence within the paired box region, which encodes a DNA-binding domain, enabling PAX proteins to bind the promoters of specific genes to transcriptionally regulate their expression. PAX2 is specifically expressed in the developing central nervous system, eye, ear, and urogenital tract, and is essential for the development of these organs. In normal adult tissues PAX2 was mainly detected in the urogenital system, including kidney, ureteric epithelium, fallopian tube epithelium, ovary and uterus. In tumors, PAX2 has been detected in renal cell carcinomas, Wilms' tumors, nephrogenic adenomas and papillary serous carcinoma of the ovary. PAX2 has been used as a marker for the identification of renal cell carcinoma and ovarian carcinoma by immunohistochemistry.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

## Product attributes

|                                       |   |
|---------------------------------------|---|
| Antibody number                       | #1104   |
| Antibody reactivity (target)          | PAX2  |
| Antibody type                         | Primary   |
| Host species                          | Mouse   |
| Clonality                             | Monoclonal  |
| Clone                                 | PAX2/1104   |
| Isotype                               | IgG2b, kappa  |
| Molecular weight                      | 42 kDa  |
| Synonyms                              | Paired box gene 2; paired box homeotic gene 2; paired box protein 2; Paired box protein Pax-2; Paired box protein Pax2  |
| Human gene symbol                     | PAX2  |
| Entrez gene ID                        | 5076  |
| SwissProt                             | Q02962  |
| Unigene                               | 155644  |
| Immunogen                             | Recombinant fragment (around aa 223-354) human PAX2 protein (exact sequence is proprietary)   |
| Verified antibody applications        | IHC (FFPE) (verified)   |
| Antibody target cellular localization | Nucleus   |
| Species reactivity                    | Human   |
| Positive control                      | NAMALWA cells. Fetal kidney or Renal Cell Carcinoma (RCC) or Ovarian Carcinoma.   |
| Shipping condition                    | Room temperature  |
| Storage Conditions                    | Store at 2 to 8 °C, Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C   |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended   |
| Regulatory status                     | For research use only (RUO)   |
| Antibody/conjugate formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Validated in protein array            | Monospecific  |
| Antibody research areas               | Cancer, Developmental biology, Transcription factors  |
| Cell/tissue expression                | Uterus, Kidney, Ovary   |
| Tumor expression                      | Kidney cancer, Ovarian cancer   |

| Antibody # prefix | Conjugation        | Ex/Em (nm) | Laser line | Detection channel        | Dye Features                     |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04             | CF®405S            | 404/431    | 405        | DAPI (microscopy), AF405 | <a href="#">CF®405S Features</a> |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF®488A Features</a> |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF®568 Features</a>  |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               | <a href="#">CF®594 Features</a>  |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     | <a href="#">CF®640R Features</a> |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     | <a href="#">CF®647 Features</a>  |
| BNCB              | Biotin             | N/A        | N/A        | N/A                      |                                  |
| BNUB              | Purified           | N/A        | N/A        | N/A                      |                                  |
| BNUM              | Purified, BSA-free | N/A        | N/A        | N/A                      |                                  |

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