

**Mouse Anti-PAX2 [MD196]: MC0442, MC0442RTU7**

**Intended Use:** For Research Use Only

**Description:** PAX2 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.

**Specifications**

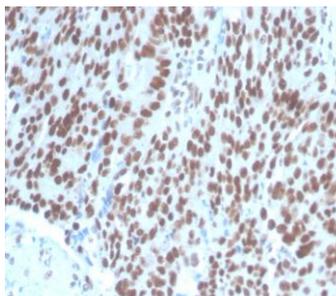
Clone: MD196  
 Source: Mouse  
 Isotype: IgG2b/k  
 Reactivity: Human  
 Immunogen: Recombinant fragment aa 223-354 of human PAX2 protein  
 Localization: Nucleus  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA  
 Package:

Description	Catalog No.	Size
PAX2 Concentrated	MC0442	1 ml
PAX2 Prediluted	MC0442RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Fetal kidney lysate, fetal or normal kidney, RCC  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°C- 99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human ovary carcinoma stained with anti-PAX2 using DAB

**References:**

1. Upregulation of PAX2 promotes the metastasis of esophageal cancer through interleukin-5. Liu P, et al. Cell Physiol Biochem. 35(2):740-54, 2015.
2. Expression of Pax2 protein during the formation of the central nervous system in human embryos. Namm A, et al. Folia Morphol (Warsz). Aug;73(3):272-8, 2014. Is PAX2 a reliable marker in differentiating diffuse malignant mesotheliomas of peritoneum from serous carcinomas of müllerian origin? Gao FF, et al. Appl Immunohistochem Mol Morphol. May;20(3):272-6, 2012.

Doc. 100-MC0442  
Rev. A