Anti-PAX8 / DIA-PX8-OD / Clone JAX8
Mouse monoclonal antibody marker for Ovarian, Thyroid and Renal Cell Carcinoma

Product Information

Catalog No.:	**DIA-PX8-OD**
Clone:	JAX8
Isotype	Mouse IgG2a
Quantity	100µl
Specificity:	PAX8
Physical State:	Liquid
Species Reactivity:	Human
Positive Control:	Ovarian Carcinoma (non-mucinous), Thyroid Carcinoma, Renal Cell Carcinoma
Visualization:	Nuclear

Presentation:	Purified antibody in Tris pH 7.3-7.7 with 1% BSA, <0.1% NaN3
Applications:	Immunohistochemistry (IHC), standard formalin-fixed paraffin sections
Dilutions:	1:100 - 1:200 IHC-P

(General recommendation, validation of antibody performance/protocol is the responsibility of the end user. Positive/negative controls should be run simultaneously with samples)

Background

Mouse monoclonal anti-PAX8 antibody clone JAX8 is suitable for the immunohistological detection of PAX8 in routine-fixed paraffin embedded tissue sections.

PAX8 is a member of the paired box (PAX) family of transcription factors involved the regulation of early development of the thyroid gland, kidney, and Müllerian tract. PAX8 plays a central role for the expression of thyroid-specific genes and thus, in development of thyroid follicular cells. Mutations in the PAX-8 gene are linked to thyroid follicular carcinomas. In the developing kidney PAX8 is important for renal vesicle formation.

PAX8 is highly expressed in several neoplasms: Epithelial tumors of the thyroid and parathyroid glands, kidney, thymus, pancreatic neuroendocrine tumors and female genital tract. Follicular and papillary thyroid carcinoma are almost always PAX8 positive (while medullary thyroid carcinoma is negative, but anaplastic carcinoma is positive in most cases). PAX8 is also found in almost all cases of endometrial carcinoma and ovarian serous, endometrioid, transitional and clear cell carcinoma. Moreover, PAX8 is found in most cases of renal cell carcinoma (all types) and in oncocytoma as well as in thymic tumours. Difefferent reports have shown that adenocarcinomas of lung and breast are negative for PAX8-expression. Also, PAX-8 is not found in the epithelial cells of the breast, lung, mesothelium, stomach, colon, pancreas.

PAX 8 is a useful IHC marker with a wide range of diagnostic applications and appears to be the most specific and sensitive marker for renal cell carcinoma and ovarian non-mucinous carcinoma.

Instructions for Use

Immunohistochemical staining of standard formalin-fixed paraffin sections

Deparaffinize and rehydrate according to standard procedures. Heat induced epitope retrieval (HIER) is required (pH 9-10 for 10-30 minutes). For immunohistochemical detection different techniques can be used: indirect immunoenzyme labeling with a secondary an-tibody conjugate, biotin/(strept)avidin-based detection, soluble enzyme immune complex or polymer-based detection. The antibody can be adapted for use on automated staining instruments.

Intented use / regulatory status

Europe: For in Vitro Diagnostic Use / All other countries: For Research Use only

Storage and Stability

Store at 2-8°C. Do not freeze. The antibody is stable until the date indicated on the label, when stored properly.

Safety Notes

The material contains <1% sodium azide as preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material. Avoid skin and eye contact, inhalation and ingestion.

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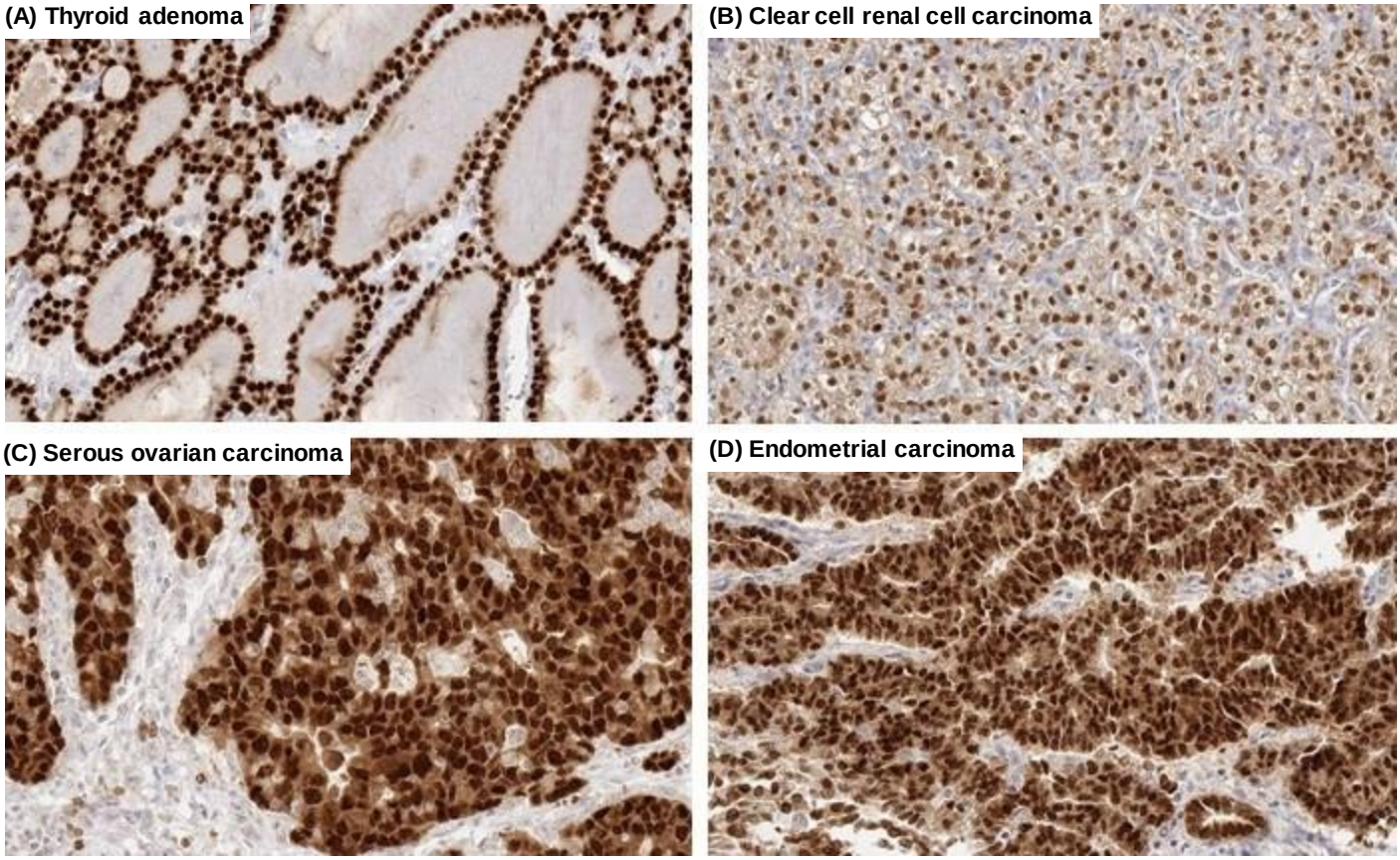
Figures

Immunohistochemistry of human PAX8 in routine formalin-fixed paraffin-embedded tissue samples

A: Benign thyroid adenoma with Strong nuclear PAX8 positivity.
B: Clear cell renal cell carcinoma with nuclear PAX8 staining.
C: Serous ovarian carcinoma with strong nuclear PAX8 staining.
D: Endometrial carcinoma with strong PAX8 staining.



(Pictures kindly provided by the Department of Pathology, University Hospital Eppendorf, Hamburg, Germany)

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