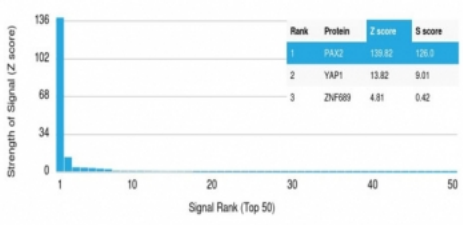
PAX2 Antibody PAX2/2994 / Protein Microarray Validated [clone PAX2/2994] (V4113)

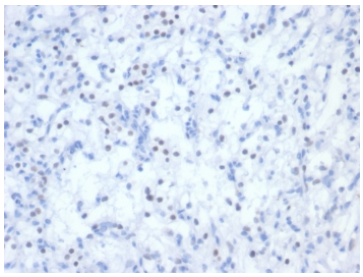
Catalog No.	Formulation	Size
V4113-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4113-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4113SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	PAX2/2994
Purity	Protein A/G affinity
UniProt	Q02962
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This PAX2 Antibody PAX2/2994 is available for research use only.



PAX2 Antibody PAX2/2994 Protein Microarray Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using PAX2 Antibody clone PAX2/2994 demonstrates strong preferential recognition of PAX2. PAX2 ranked first with a Z-score of 138.82 and an S-score of 126.0. The Z-score represents signal strength in standard deviations above the array mean, while the S-score measures separation from the next highest-ranked protein and indicates relative target specificity. These results demonstrate the high specificity of PAX2 Antibody clone PAX2/2994 for PAX2 in human protein microarray testing.



PAX2 Antibody PAX2/2994 Human Renal Cell Carcinoma IHC. Immunohistochemical staining of FFPE human renal cell carcinoma tissue with PAX2 Antibody clone PAX2/2994 demonstrates nuclear PAX2 expression. Heat-induced epitope retrieval was performed by boiling sections in pH9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling. Brown nuclear staining is observed in tumor cells, with hematoxylin counterstaining in blue. This PAX2 Antibody Protein Microarray Validated mouse monoclonal demonstrates the staining characteristics of clone PAX2/2994 in human renal cell carcinoma tissue.

Description

PAX2 Antibody PAX2/2994 is a protein microarray validated mAb that recognizes PAX2, a nuclear transcription factor and member of the paired box family of developmental regulatory proteins. PAX2 contains a conserved paired DNA-binding domain that enables regulation of genes involved in embryogenesis, cellular differentiation, and organ formation. Expression of PAX2 is particularly important during development of the kidney and urogenital system, with additional functions in development of selected structures of the nervous system, eye, and ear. The restricted developmental expression of PAX2 reflects its role in establishing and maintaining specific cellular lineages.

PAX2 has a particularly prominent role in renal organogenesis. During embryonic development, it contributes to specification of the nephric lineage and formation of structures involved in development of the kidney and urinary tract. PAX2 expression is prominent in developing renal tissues but becomes substantially restricted in most mature kidney structures. Disruption of PAX2 function can interfere with normal renal and ocular development. A PAX2 Antibody can support research into kidney development, renal differentiation, urogenital biology, and transcriptional mechanisms controlling organogenesis.

PAX2 is also studied as a lineage-associated transcription factor in cancer biology. Persistent or reactivated expression has been reported in several malignancies, particularly tumors associated with renal and MÃƒÂ¼llerian lineages. PAX2 expression is therefore investigated in renal cell carcinoma and selected ovarian and endometrial tumors, as well as in research examining the relationship between developmental transcription programs and neoplastic transformation. PAX2 Antibody clone PAX2/2994 provides a mouse monoclonal reagent for investigating Paired Box 2 expression in developmental and cancer research.

Clone PAX2/2994 has been evaluated using a human protein microarray containing a broad representation of the human proteome. Protein microarray analysis provides an additional approach for assessing recognition of the intended target relative to thousands of other human proteins and complements application-specific validation. NSJ Bioreagents offers PAX2/2994 for studies of developmental transcription, renal biology, cellular differentiation, and cancer. This PAX2 Antibody is a Protein Microarray Validated mouse monoclonal reagent for investigating PAX2 expression and Paired Box 2-associated biology.

For additional information on PAX2 biology and available antibodies, see our PAX2 Antibody / Paired Box 2 Antibody page.

Application Notes

Optimal dilution of the PAX2 Antibody PAX2/2994 should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 200-400) from the human protein was used as the immunogen for the PAX2 antibody.

Storage

Aliquot the PAX2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

PAX2 antibody, Paired Box 2 antibody, PAX-2 antibody, Paired Box Gene 2 antibody, PAX2/2994 antibody

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