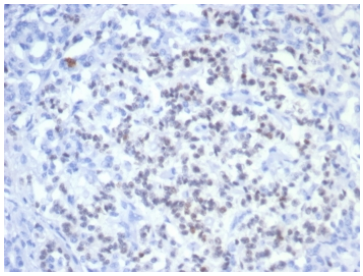
PAX6 Antibody Mouse Monoclonal PAX6/7707 [clone PAX6/7707] (V4134)

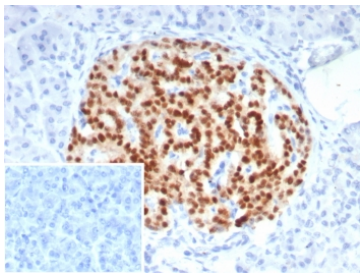
Catalog No.	Formulation	Size
V4134-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4134-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4134SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

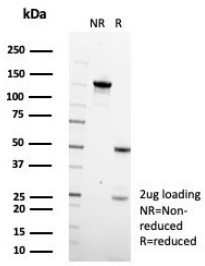
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	PAX6/7707
Purity	Protein A/G affinity
UniProt	P26367
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This PAX6 antibody is available for research use only.



PAX6 Antibody Mouse Monoclonal PAX6/7707 immunohistochemistry analysis of human pancreatic cancer tissue. Formalin-fixed paraffin-embedded human pancreatic carcinoma stained with PAX6 Antibody Mouse Monoclonal PAX6/7707. HRP-DAB brown chromogenic staining highlights nuclei of tumor cells, consistent with the expected nuclear localization of Paired Box Protein Pax-6 / PAX6. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes and allow to cool before testing.



PAX6 Antibody Mouse Monoclonal PAX6/7707 immunohistochemistry analysis of human pancreas tissue. Formalin-fixed paraffin-embedded human pancreas stained with PAX6 Antibody Mouse Monoclonal PAX6/7707. HRP-DAB brown chromogenic staining highlights nuclei of endocrine cells within pancreatic islets, consistent with the expected nuclear localization of Paired Box Protein Pax-6 / PAX6. Inset: PBS used in place of the primary antibody serves as a secondary antibody negative control. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free PAX6 antibody (clone PAX6/7707) as confirmation of integrity and purity.

Description

Paired box protein Pax-6 (PAX6) is a nuclear transcription factor encoded by the PAX6 gene and functions as a master regulator of eye development and neural differentiation. The protein belongs to the paired box family of transcription factors and controls transcriptional programs that regulate tissue patterning, neuronal specification, and organogenesis. PAX6 Antibody Mouse Monoclonal PAX6/7707 recognizes Pax-6 and supports research investigating transcriptional regulation during embryonic development and neural lineage commitment.

PAX6 plays a critical role during embryogenesis in formation of the retina, lens, cornea, and other ocular structures. The transcription factor is also expressed in neural progenitor cells within the developing brain where it contributes to regional patterning of the cerebral cortex and differentiation of neuronal populations. Because of its essential developmental functions, Pax-6 expression is frequently examined in studies of neurogenesis, stem cell biology, and developmental signaling pathways.

The PAX6 protein contains multiple functional domains responsible for DNA binding and transcriptional regulation. An N-terminal paired domain binds specific DNA sequences within regulatory regions of target genes. A homeodomain provides additional DNA-binding capability, and the C-terminal proline-serine-threonine rich transactivation domain interacts with transcriptional co-regulators to activate gene expression. Through these domains Pax-6 coordinates transcription of genes involved in cellular differentiation and tissue morphogenesis.

Mouse monoclonal antibodies provide highly specific detection of target proteins by recognizing a single epitope on the antigen. PAX6 Antibody Mouse Monoclonal PAX6/7707 therefore enables precise detection of Pax-6 protein and supports reproducible results in experimental systems where consistent epitope recognition is required. Monoclonal antibodies are frequently used for studies examining transcription factor expression and localization across different biological samples.

PAX6 antibody reagents are commonly described in the literature using several related names including PAX6 antibody, Pax-6 antibody, paired box protein Pax-6 antibody, and aniridia type II protein antibody. These terms all refer to the transcription factor encoded by the PAX6 gene. PAX6 Antibody Mouse Monoclonal PAX6/7707 recognizes Pax-6 protein and supports research focused on transcriptional regulation, developmental gene networks, and neural differentiation pathways.

Application Notes

Optimal dilution of the PAX6 Antibody Mouse Monoclonal PAX6/7707 should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 1-300) from the human protein was used as the immunogen for the PAX6 antibody.

Storage

Aliquot the PAX6 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Pax-6 antibody, paired box protein Pax-6 antibody, aniridia type II protein antibody, Pax6 transcription factor antibody

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