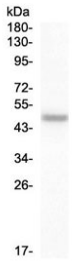
PAX8 Antibody / Epithelial Lineage Stability Marker Antibody (RQ4059)

Catalog No.	Formulation	Size
RQ4059	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q06710
Applications	Western Blot: 0.5-1ug/ml
Limitations	This PAX8 antibody is available for research use only.



PAX8 Antibody / Epithelial Lineage Stability Marker Antibody western blot analysis in human SW579 cell lysate. A band is detected at approximately 55-60 kDa, above the predicted molecular weight of Paired box protein Pax-8 (PAX8) at ~48 kDa. The observed upward shift in apparent molecular weight is consistent with post-translational modification or altered electrophoretic mobility commonly seen in nuclear transcription factors. This banding pattern supports detection of PAX8 and reflects its stable expression in epithelial lineage cells maintaining transcriptional identity.

Description

Paired box protein Pax-8 (PAX8) is a nuclear transcription factor encoded by the PAX8 gene that plays a key role in maintaining epithelial lineage stability in thyroid, renal, and Mullerian-derived tissues. Its sustained expression reflects preservation of lineage-specific transcriptional programs that define cellular identity. PAX8 Antibody is uniquely positioned for studies focused on lineage stability rather than initial differentiation or tumor origin identification.

PAX8 antibody, also known as Paired box protein Pax-8 antibody or Pax-8 transcription factor antibody, is strongly associated with stable epithelial phenotypes. This PAX8 Antibody is uniquely positioned for detecting cells that maintain

lineage-specific transcriptional identity over time, distinguishing it from differentiation-focused pages that emphasize developmental transitions or tumor progression.

Functionally, PAX8 regulates genes that support epithelial structure, differentiation, and long-term cellular organization. Its activity ensures that cells retain their specialized phenotype and resist transitions to alternative lineage states. This stabilizing role is essential for maintaining tissue integrity in organs with long-lived epithelial populations.

Loss or reduction of PAX8 expression can indicate breakdown of lineage stability, often associated with dedifferentiation, cellular plasticity, or disease progression. Conversely, sustained nuclear expression reflects preservation of lineage identity even in transformed or stressed cells, making PAX8 a useful marker for assessing stability of epithelial phenotypes.

At the cellular level, uniform nuclear PAX8 staining suggests stable lineage identity across cell populations, while heterogeneous or reduced staining may indicate dynamic changes in differentiation state. This allows researchers to assess stability versus plasticity within tissues or tumors.

PAX8 Antibody therefore provides a focused tool for studying epithelial lineage stability and identity maintenance, with emphasis on preservation of transcriptional programs rather than lineage specification or tumor origin. This makes it particularly valuable for studies of cellular plasticity, epithelial integrity, and long-term maintenance of differentiated states.

Application Notes

Optimal dilution of the PAX8 Antibody / Epithelial Lineage Stability Marker Antibody should be determined by the researcher.

Immunogen

Amino acids RKHLRTDAFSQHHLEPLECPFERQHYPEAYASPSHTKGEQ from the human protein were used as the immunogen for the PAX8 Antibody / Epithelial Lineage Stability Marker Antibody.

Storage

After reconstitution, the PAX8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

PAX8 lineage stability antibody, Paired box protein Pax-8 epithelial stability antibody, PAX8 identity maintenance antibody, Pax-8 lineage preservation antibody, PAX8 epithelial integrity marker antibody

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