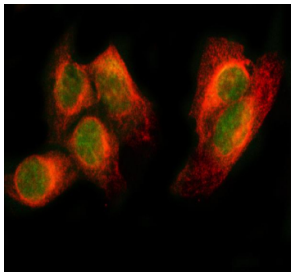
PAX8 Antibody for IF / Paired Box Protein Pax-8 Immunofluorescence Antibody (FY12105)

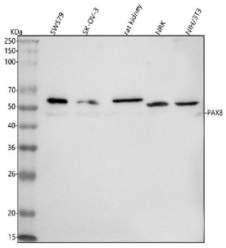
Catalog No.	Formulation	Size
FY12105	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q06710
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This PAX8/Paired box gene 8 antibody is available for research use only.



PAX8 Antibody for IF / Paired Box Protein Pax-8 Immunofluorescence Antibody immunofluorescence analysis in human HeLa cells showing strong nuclear localization of Paired box protein Pax-8 (PAX8). The rabbit polyclonal PAX8 antibody produces a distinct nuclear fluorescence signal (green), clearly delineating nuclei, while Beta Tubulin highlights the cytoplasmic microtubule network (red) as a structural reference. The merged image demonstrates sharp nuclear green staining surrounded by red cytoplasmic signal, enabling clear cell boundary definition and subcellular localization assessment. This pattern is consistent with the role of PAX8 as a nuclear transcription factor and supports its use in multiplex immunofluorescence applications for precise cellular and spatial analysis.



Western blot analysis of PAX8/Paired box gene 8 using anti-PAX8 antibody. Lane 1: human SW579 whole cell lysates, Lane 2: human SK-OV-3 whole cell lysates, Lane 3: rat kidney tissue lysates, Lane 4: rat NRK whole cell lysates, Lane 5: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PAX8 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for PAX8 at approximately 48 kDa. The expected band size for PAX8 is at 48 kDa.

Description

Paired box protein Pax-8 (PAX8) is a nuclear transcription factor encoded by the PAX8 gene and a member of the paired box (PAX) family, playing a key role in epithelial lineage specification in thyroid, renal, and Mullerian-derived tissues. It functions within the nucleus to regulate transcriptional programs that define cellular identity. PAX8 Antibody for IF is specifically designed for fluorescence-based imaging, enabling precise visualization of nuclear localization patterns at the single-cell level.

PAX8 antibody, also known as Paired box protein Pax-8 antibody or Pax-8 transcription factor antibody, recognizes a protein that produces a highly defined nuclear fluorescence signal in immunofluorescence assays. This distinct nuclear staining pattern allows clear separation of PAX8-positive epithelial cells from surrounding stromal or negative cell populations, making it particularly useful in heterogeneous samples. The sharp nuclear signal is a key advantage in IF, where spatial resolution and signal-to-background contrast directly impact data interpretation.

PAX8 Antibody for IF is uniquely positioned for applications requiring high-resolution cellular imaging and co-localization analysis. As a rabbit polyclonal antibody, it supports strong fluorescence signal intensity and broad compatibility with commonly used secondary antibodies, including Alexa Fluor and other fluorophore-conjugated reagents. This makes it well suited for multiplex immunofluorescence experiments where PAX8 is combined with markers of cytoplasm, membrane, or other nuclear proteins to define cell identity and architecture within complex tissues.

In immunofluorescence workflows, detection of transcription factors depends on preserving nuclear integrity and minimizing background fluorescence. PAX8 Antibody for IF supports clean nuclear staining with low non-specific signal when appropriate fixation and permeabilization conditions are used. This enables accurate assessment of nuclear distribution, cell-to-cell variation, and spatial organization of PAX8-expressing cells in both cultured systems and tissue sections.

PAX8 Antibody for IF provides a targeted solution for visualizing transcription factor localization in fluorescence microscopy applications. It enables researchers to confirm nuclear targeting, distinguish lineage-specific cell populations, and perform detailed imaging-based analyses of epithelial differentiation. The ability to generate strong, well-defined nuclear fluorescence signals makes it particularly valuable for studies where precise cellular localization and co-staining interpretation are central to the analysis.

Application Notes

Optimal dilution of the PAX8 Antibody for IF / Paired Box Protein Pax-8 Immunofluorescence Antibody should be determined by the researcher.

Immunogen

E.coli-derived human PAX8 recombinant protein (Position: Q137-L450) was used as the immunogen for the PAX8 Antibody for IF / Paired Box Protein Pax-8 Immunofluorescence Antibody.

Storage

After reconstitution, the PAX8/Paired box gene 8 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 immunofluorescence antibody, Paired box protein Pax-8 IF antibody, PAX8 fluorescence antibody, Pax-8 IF antibody, PAX8 rabbit polyclonal antibody