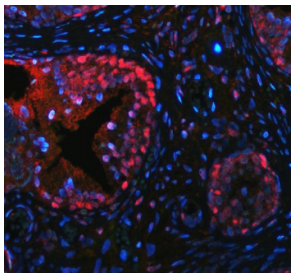
p63 Antibody for IF / TP63 Immunofluorescence Antibody (R31572)

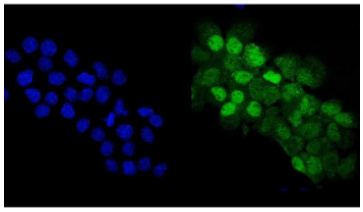
Catalog No.	Formulation	Size
R31572	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

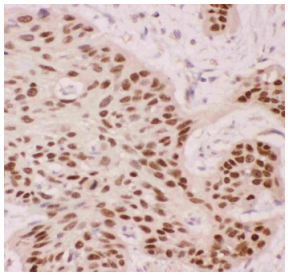
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q9H3D4
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This p63 antibody is available for research use only.



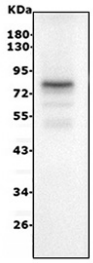
p63 Antibody for IF. Immunofluorescence analysis of FFPE human prostate hyperplasia tissue using a rabbit polyclonal p63 antibody for IF demonstrates strong nuclear staining in basal epithelial cells (red), consistent with the role of Tumor protein 63 (TP63) as a nuclear transcription factor. Signal is restricted to the basal cell layer surrounding glandular structures, while luminal epithelial cells remain largely negative, clearly outlining epithelial architecture and basal cell compartments. DAPI nuclear counterstain (blue) labels all nuclei, providing contrast for precise identification of TP63-positive cells within the tissue. Heat-induced epitope retrieval was performed by steaming sections in pH 8 EDTA buffer for 20 minutes prior to antibody incubation.



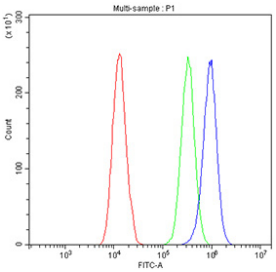
p63 Antibody for IF. Immunofluorescence analysis of FFPE human A431 cells using a rabbit polyclonal p63 antibody for IF demonstrates strong nuclear staining in TP63-positive cells (green), consistent with the role of Tumor protein 63 as a nuclear transcription factor. Signal is confined to the nucleus with minimal cytoplasmic background, allowing clear identification of TP63-expressing cells within the population. DAPI nuclear counterstain (blue) labels all nuclei, enabling direct comparison between positive and negative cells and highlighting cell-to-cell variability in TP63 expression. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 minutes prior to antibody incubation.



IHC staining of FFPE human esophagus squama cancer tissue with p63 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human A431 cell lysate with p63 antibody. Predicted molecular weight: 47-77 kDa (multiple isoforms).



Flow cytometry testing of fixed and permeabilized human A431 cells with p63 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= p63 antibody.

Description

Tumor protein 63 (TP63) is a nuclear transcription factor belonging to the p53 family that plays a central role in epithelial development, basal cell maintenance, and stratified tissue organization. In this context, p63 Antibody for IF is particularly valuable for visualizing nuclear expression patterns with high spatial resolution, enabling precise identification of TP63-positive cell populations within complex epithelial structures.

p63 antibody, also known as TP63 antibody or Tumor protein 63 antibody in the literature, is widely used as a nuclear epithelial marker due to its highly restricted and interpretable staining pattern. Unlike cytoplasmic or membranous markers, TP63 produces strong, discrete nuclear signal, making it especially well suited for immunofluorescence imaging where signal clarity, subcellular localization, and cell-to-cell contrast are critical. This property allows researchers to confidently distinguish TP63-positive nuclei from surrounding negative cells, which is essential in heterogeneous tissues and mixed cell populations.

The IF-based differentiator is particularly strong for TP63 because fluorescence microscopy enables detailed evaluation of nuclear architecture, cell layer distribution, and co-localization with other markers. p63 Antibody for IF is commonly used to define basal epithelial compartments, where TP63 expression marks progenitor or stem-like cells positioned

along the basal layer. This makes it highly effective for studies examining epithelial polarity, differentiation gradients, and lineage relationships, especially when combined with cytokeratin markers, proliferation markers, or other lineage-specific proteins in multiplex immunofluorescence panels.

TP63 exists as multiple isoforms, including TAp63 and deltaNp63 variants, which contribute to distinct regulatory functions in development and tissue homeostasis. In immunofluorescence applications, these isoforms are typically visualized as nuclear signal with varying intensity across cell populations, allowing researchers to assess relative expression patterns, cellular heterogeneity, and changes associated with differentiation or disease. The ability to quantify fluorescence intensity and compare nuclear signal across regions adds another layer of analytical value that is not accessible through chromogenic methods alone.

A rabbit polyclonal p63 antibody is well suited for immunofluorescence workflows due to its ability to recognize multiple epitopes, supporting strong signal detection across fixed cells and tissue sections. This can be especially beneficial in IF experiments requiring consistent nuclear labeling under different fixation or permeabilization conditions. Because TP63 is a cornerstone nuclear marker for epithelial biology, the p63 Antibody for IF is best positioned as a tool for high-resolution nuclear visualization, co-localization studies, and multiplex imaging strategies where accurate subcellular localization and cell identity mapping are essential.

Overall, Tumor protein 63 antibody provides a robust approach for fluorescence-based detection of epithelial nuclei, enabling detailed analysis of tissue architecture, basal cell distribution, and nuclear marker relationships in both normal and disease contexts, with clear advantages for imaging-driven experimental designs.

Learn more about p63 expression, basal cell identification, epithelial differentiation, and stem cell biology on our p63 Antibody / Basal Cell Marker Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the p63 Antibody for IF / TP63 Immunofluorescence Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 311-680) was used as the immunogen for this p63 Antibody for IF / TP63 Immunofluorescence Antibody.

Storage

After reconstitution, the p63 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

TP63 immunofluorescence antibody, Tumor protein 63 IF antibody, p63 nuclear marker antibody, TP63 basal cell IF antibody

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