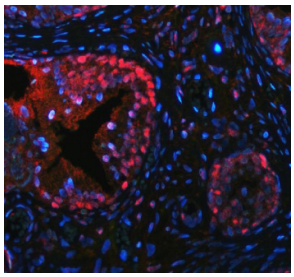
p63 Antibody / Tumor protein 63 (R31572)

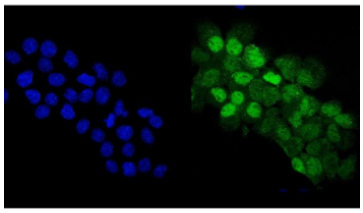
Catalog No.	Formulation	Size
R31572	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

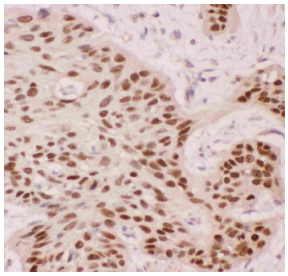
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q9H3D4
Localization	Nuclear
Applications	Western Blot : 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.



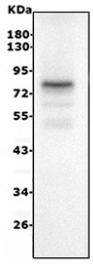
Immunofluorescent staining of FFPE human prostate hyperplasia tissue with p63 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



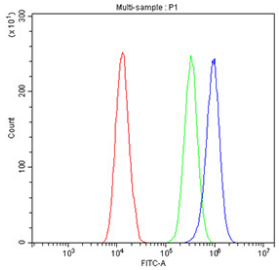
Immunofluorescent staining of FFPE human A431 cells with p63 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



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

p63, also known as Tumor protein 63, is a transcription factor and a member of the p53 family of proteins. While closely related to p53, p63 performs distinct biological functions, particularly in epithelial development, cell differentiation, and tissue regeneration. It exists in multiple isoforms due to alternative promoter usage and splicing, each with unique roles in regulating gene expression.

During embryonic development, p63 is critical for the formation of stratified epithelia, skin appendages, and limb structures. Mice lacking p63 show severe defects in skin and craniofacial development, emphasizing its importance in morphogenesis. Beyond development, p63 remains active in adult tissues, where it regulates epithelial stem cell maintenance and barrier integrity. Its dysregulation has been linked to various diseases, including ectodermal dysplasias and cancers, particularly squamous cell carcinoma.

Research has shown that p63 plays both oncogenic and tumor-suppressive roles depending on isoform expression and cellular context. This dual functionality makes it a key focus in cancer biology. The Î”Np63 isoform is frequently overexpressed in epithelial tumors, where it contributes to proliferation and survival, while TAp63 isoforms are more associated with apoptosis and tumor suppression.

A p63 antibody is an important tool for investigating tissue differentiation, tumor progression, and epithelial biology. Applications of a p63 antibody include western blotting, immunohistochemistry, and immunofluorescence, where it is widely used as a marker for squamous epithelial cells and certain carcinomas. NSJ Bioreagents provides a high-quality p63 antibody to support researchers in studies spanning development, oncology, and regenerative biology.

Application Notes

The stated application concentrations are suggested starting points. Titration of the p63 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.

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.