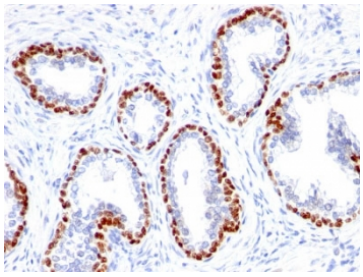
p63 Antibody / Tumor protein 63 [clone TP63/1423R] (V3815)

Catalog No.	Formulation	Size
V3815-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3815-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3815SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

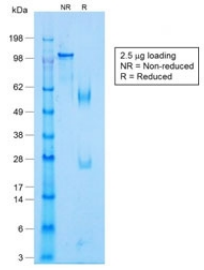
Recombinant RABBIT MONOCLONAL

Bulk quote request

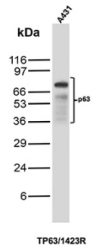
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	TP63/1423R
Purity	Protein A affinity chromatography
UniProt	Q9H3D4
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This recombinant p63 antibody is available for research use only.



Immunohistochemistry analysis of p63 expression. Recombinant p63 antibody (clone TP63/1423R) staining was performed on formalin-fixed, paraffin-embedded human prostate cancer tissue, showing strong nuclear DAB signal in basal-type epithelial cells, with surrounding stromal cells largely negative and hematoxylin counterstaining. Heat-induced epitope retrieval was carried out by boiling tissue sections in Tris buffer (10 mM, pH 9.0) containing EDTA (1 mM) for 10-20 minutes, followed by cooling at room temperature for 20 minutes, with signal detection using an HRP-conjugated secondary antibody and DAB chromogen.



SDS-PAGE analysis of purified, BSA-free recombinant p63 antibody (clone TP63/1423R) as confirmation of integrity and purity.



Western blot analysis of p63 expression. Whole cell lysate from human A431 cells was analyzed by SDS-PAGE and immunoblotting using recombinant p63 antibody (clone TP63/1423R). A prominent band is detected at the predicted molecular weight range corresponding to p63, consistent with expression of p63 isoforms in A431 cells.

Description

p63 antibody targets Tumor protein 63, a transcription factor belonging to the p53 family that plays a central role in epithelial development, differentiation, and tissue homeostasis. Tumor protein 63 is primarily localized to the nucleus, where it functions as a DNA binding regulator of gene expression. p63 is highly expressed in basal and progenitor cells of stratified epithelia, including epidermis, prostate, urothelium, and respiratory epithelium, making it a widely used marker of epithelial stem and basal cell populations.

Tumor protein 63 is expressed as multiple isoforms generated through alternative promoter usage and splicing, broadly classified into transcriptionally active and dominant negative variants. A short functional summary is that p63 maintains epithelial progenitor cell identity and supports stratified epithelial integrity by regulating genes involved in proliferation, differentiation, and cell adhesion. Because of this fundamental role, p63 antibody reagents are essential tools in studies of epithelial biology and tissue architecture.

At the molecular level, Tumor protein 63 contains an N-terminal transactivation domain in certain isoforms, a central DNA binding domain, and a C-terminal oligomerization domain that enables tetramer formation. These structural features allow p63 to function as a transcriptional regulator and to interact with other members of the p53 family. p63 antibody tools are commonly used to examine nuclear localization, isoform expression patterns, and changes in epithelial differentiation status in both normal and diseased tissues.

From a disease relevance perspective, p63 is extensively used in diagnostic pathology as a marker to distinguish squamous cell carcinomas, basal-like tumors, and myoepithelial cells from other neoplastic entities. Altered expression or isoform imbalance of Tumor protein 63 has been implicated in cancer progression, epithelial dysplasia, and developmental disorders affecting ectoderm derived tissues. Clone TP63/1423R is designed to recognize Tumor protein 63 and support consistent detection of p63 expression in research and histological studies.

Developmentally, p63 expression is critical for epithelial stratification and limb and craniofacial morphogenesis. Loss of p63 function leads to severe defects in epithelial formation and maintenance. Recombinant rabbit antibody clone TP63/1423R provides a reliable research reagent for detecting Tumor protein 63 in studies of epithelial development, cancer biology, and tissue differentiation. p63 antibodies from NSJ Bioreagents are supplied as recombinant rabbit antibodies for research use to support investigations in cell biology and pathology.

Application Notes

Optimal dilution of the recombinant p63 antibody should be determined by the researcher.

Immunogen

Full-length human recombinant protein was used as the immunogen for the recombinant p63 antibody.

Storage

Store the recombinant p63 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).