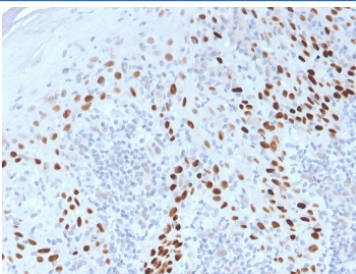


p40 Antibody / Epithelial Stratification and Differentiation Marker Antibody (V8182)

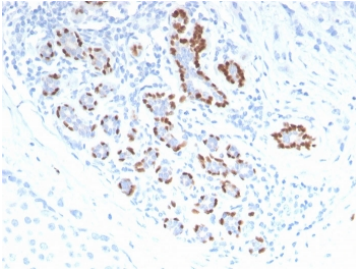
Catalog No.	Formulation	Size
V8182-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8182-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8182SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Protein A affinity chromatography
UniProt	Q9H3D4
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This p40 antibody is available for research use only.



p40 Antibody. Immunohistochemistry analysis of FFPE human cervix tissue demonstrates strong HRP-DAB brown nuclear staining in basal and parabasal epithelial cells, with progressively reduced staining in more differentiated superficial layers. The nuclear-restricted pattern reflects epithelial layering and supports use of this antibody as an epithelial stratification and differentiation marker, highlighting the transition from proliferative basal compartments to differentiated cell populations. Staining is well-defined with minimal background, allowing clear visualization of epithelial organization and differentiation gradients. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



p40 Antibody. Immunohistochemistry analysis of FFPE human breast carcinoma tissue demonstrates focal HRP-DAB brown nuclear staining in tumor cell clusters, while surrounding stromal elements remain largely negative. The nuclear-restricted pattern highlights epithelial cells with basal-like characteristics and supports use of this antibody as an epithelial stratification and differentiation marker, reflecting deltaNp63-associated regulation of epithelial layering and cell state. Staining is heterogeneous across tumor regions, allowing identification of p40-positive subpopulations within the carcinoma. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.

Description

Tumor protein p40 (TP63), corresponding to the deltaNp63 isoform, is a nuclear transcription factor that regulates epithelial stratification and the progression of cells through differentiation states within multilayered epithelia. p40 Antibody is widely used as an epithelial stratification and differentiation gradient marker antibody for studying how epithelial layers are established, maintained, and dynamically regulated. Nuclear deltaNp63 expression defines basal and early progenitor layers, creating a measurable gradient that reflects differentiation status.

p40 antibody, also known as deltaNp63 antibody or TP63 deltaNp63 antibody in the literature, provides isoform-specific detection that aligns directly with stratification biology. By selectively targeting deltaNp63, this antibody highlights the transcriptional programs responsible for maintaining basal layers and regulating the transition toward differentiated states.

This p40 Antibody is uniquely positioned for analysis of epithelial layering, where understanding the spatial organization of cells across different differentiation states is critical. deltaNp63 expression is typically highest in basal layers and decreases as cells move toward the surface and undergo terminal differentiation, creating a distinct nuclear staining gradient.

The stratification differentiator is especially valuable in tissues such as skin and mucosal epithelium, where multiple cell layers represent sequential stages of differentiation. p40 Antibody enables visualization of these layers through nuclear staining patterns, allowing researchers to assess epithelial organization and identify disruptions in stratification.

In tissue-based applications, p40 Antibody produces strong nuclear staining in basal and early suprabasal cells, with progressively reduced staining in more differentiated layers. This pattern supports interpretation of differentiation gradients and provides insight into the balance between proliferation and differentiation within epithelial tissues.

deltaNp63 plays a critical role in coordinating epithelial layering by maintaining basal cell identity while regulating the transition of cells into differentiated states. Its nuclear expression reflects active transcriptional control of these processes, linking molecular regulation to observable tissue structure.

p40 Antibody as an epithelial stratification and differentiation gradient marker antibody is particularly useful for studies of tissue development, epithelial remodeling, and disease-associated alterations in stratification patterns. It enables researchers to visualize and quantify changes in epithelial organization with high spatial resolution.

Tumor protein p40 antibody provides a powerful tool for analyzing epithelial stratification, supporting detailed investigation of differentiation gradients, tissue architecture, and TP63-driven regulation of epithelial organization.

Application Notes

Optimal dilution of the p40 Antibody / Epithelial Stratification and Differentiation Marker Antibody should be determined by the researcher.

Immunogen

A recombinant human p40 protein fragment was used as the immunogen for the p40 Antibody / Epithelial Stratification and Differentiation Marker Antibody.

Storage

Store the p40 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

p40 stratification marker antibody, deltaNp63 epithelial layering antibody, TP63 differentiation gradient antibody, p40 stratified epithelium antibody