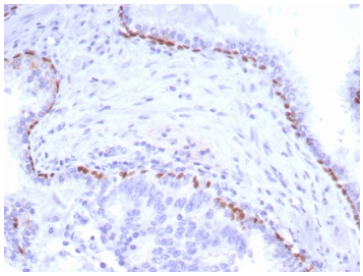
p40 Antibody / Squamous Lineage Determination Marker Antibody [clone P40/8225R] (V5028)

Catalog No.	Formulation	Size
V5028-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5028-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5028SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

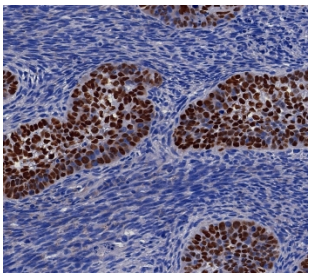
Recombinant RABBIT MONOCLONAL

Bulk quote request

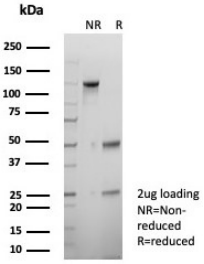
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	P40/8225R
Purity	Protein A affinity
UniProt	Q9H3D4
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This p40 antibody is available for research use only.



p40 Antibody / Squamous Lineage Determination Marker Antibody. Immunohistochemistry analysis of Tumor protein p40 (deltaNp63) in FFPE human prostate carcinoma tissue using a p40 antibody (clone P40/8225R) demonstrates distinct HRP-DAB brown nuclear staining in basal epithelial cells outlining residual benign glandular structures, while malignant luminal tumor cells remain negative. The nuclear-restricted staining pattern highlights preserved basal cell layers and clearly contrasts with carcinoma regions lacking basal cells, supporting interpretation of epithelial lineage and glandular architecture. Surrounding stromal cells show minimal staining, providing clean background and strong signal specificity. 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 lung carcinoma tissue demonstrates strong HRP-DAB brown nuclear staining in tumor cell clusters consistent with squamous differentiation, while surrounding stromal cells remain negative. The nuclear-restricted staining pattern supports use of this antibody as a squamous lineage determination marker, highlighting epithelial tumor cells and enabling clear distinction from non-squamous components. Staining is intense and well-defined, allowing accurate interpretation of tumor phenotype and cellular organization. Expression is consistent with deltaNp63, a TP63 isoform associated with squamous epithelial lineage commitment. 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.



SDS-PAGE analysis of purified, BSA-free p40 antibody (clone P40/8225R) as confirmation of integrity and purity.

Description

Tumor protein p40 (TP63), corresponding to the deltaNp63 isoform, is a nuclear transcription factor that functions as a central regulator of squamous epithelial lineage commitment. p40 Antibody is widely used as a squamous lineage determination marker antibody for identifying cells that have adopted or maintain squamous epithelial identity, where nuclear deltaNp63 expression reflects activation of lineage-defining transcriptional programs. This marker operates upstream of structural differentiation, making it a direct indicator of lineage commitment rather than simply a marker of terminal differentiation.

p40 antibody, also known as deltaNp63 antibody or TP63 deltaNp63 antibody in the literature, provides isoform-specific detection that distinguishes it from broader p63 antibodies. By selectively detecting deltaNp63 and avoiding TAp63 variants, p40 Antibody enables a more precise interpretation of epithelial lineage identity. This is particularly important in tissues and tumors where multiple epithelial phenotypes coexist, and accurate lineage classification is required for meaningful analysis.

This p40 Antibody is uniquely positioned for studies focused on squamous lineage determination, where identifying lineage commitment at the transcriptional level provides deeper insight than morphology alone. deltaNp63 regulates gene networks involved in epithelial adhesion, stratification, and keratinocyte differentiation, reinforcing its role as a master regulator of squamous identity. Its nuclear expression marks cells that are actively engaged in maintaining this lineage program.

The lineage determination differentiator is especially valuable in heterogeneous tissue environments, where glandular, transitional, or mesenchymal components may be present alongside squamous cells. p40 Antibody produces a nuclear-restricted staining pattern that allows clear identification of squamous lineage cells, enabling researchers to distinguish lineage commitment within mixed populations and evaluate lineage-specific distribution within tissue architecture.

In tissue-based analysis, p40 Antibody highlights squamous epithelial compartments and basal cell layers with strong nuclear staining, while leaving non-squamous or stromal regions largely negative. This contrast supports direct interpretation of lineage boundaries and cellular organization, allowing researchers to map squamous differentiation within intact tissues.

deltaNp63 expression is also associated with maintenance of proliferative epithelial compartments and resistance to differentiation signals, further emphasizing its role in defining and stabilizing squamous lineage identity. Its presence

indicates not only lineage commitment but also active transcriptional maintenance of that identity state.

p40 Antibody as a squamous lineage determination marker antibody is particularly useful for studies of epithelial development, lineage plasticity, and tumor biology, where understanding how cells acquire and maintain lineage identity is critical. The ability to detect lineage commitment at the nuclear level provides a powerful tool for analyzing epithelial differentiation pathways.

Tumor protein p40 antibody (clone P40/8225R) enables precise identification of squamous lineage cells, supporting detailed investigation of lineage determination, epithelial organization, and TP63-driven transcriptional regulation.

Application Notes

Optimal dilution of the p40 Antibody / Squamous Lineage Determination Marker Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the p40 Antibody / Squamous Lineage Determination Marker Antibody.

Storage

Aliquot the p40 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

p40 squamous lineage antibody, deltaNp63 lineage marker antibody, TP63 epithelial lineage antibody, p40 cell fate marker antibody

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