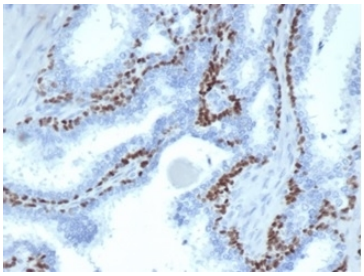
p63 Antibody Microarray Specificity Validated / TP63 HuProt-Validated Antibody [clone TP63/4379R] (V9353)

Catalog No.	Formulation	Size
V9353-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9353-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9353SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

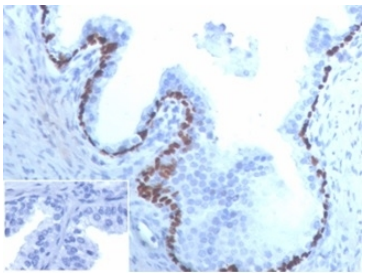
Recombinant RABBIT MONOCLONAL

Bulk quote request

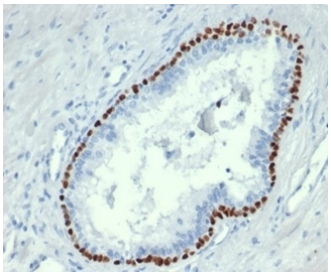
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	TP63/4379R
Purity	Protein A affinity
UniProt	Q9H3D4
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant p63 antibody is available for research use only.



p63 Antibody Microarray Specificity Validated Clone TP63/4379R. Immunohistochemistry analysis of Tumor protein 63 (TP63) in FFPE human prostate cancer tissue using a recombinant rabbit monoclonal p63 antibody for IHC (clone TP63/4379R) demonstrates strong HRP-DAB brown nuclear staining in basal epithelial cells, while malignant glandular epithelial cells show little to no staining. This distinct basal-restricted pattern supports the role of TP63 as a basal cell marker and highlights loss of basal cell layer in prostate carcinoma. The clean nuclear signal with minimal background is consistent with the high specificity profile established by microarray validation, supporting accurate interpretation of TP63 expression in tissue sections. 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.



IHC staining of FFPE human prostate cancer tissue with recombinant p63 antibody (clone TP63/4379R). Negative control inset: PBS instead of primary antibody to control for secondary binding. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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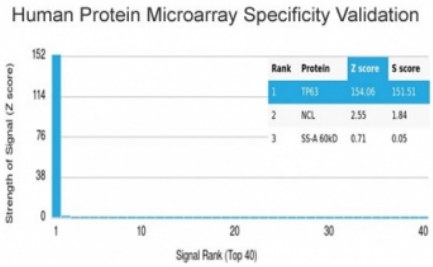

p63 Antibody Microarray Specificity Validated Clone TP63/4379R. Protein microarray analysis using a HuProt(TM) array containing more than 19,000 full-length human proteins demonstrates highly selective binding of recombinant rabbit monoclonal clone TP63/4379R to Tumor protein 63 (TP63). The antibody shows a dominant top-ranked signal for TP63 with a very high Z-score and strong separation from all other proteins, indicating robust target recognition with minimal off-target interaction. Signals for non-target proteins are negligible, supporting a clean specificity profile across the proteome. Z-score reflects signal intensity relative to the array mean, while S-score represents the separation between the TP63 signal and the next highest-ranking proteins, confirming clear discrimination of the intended target. These results support the use of this p63 antibody for applications requiring high specificity and confident interpretation of TP63 detection.

Description

Tumor protein 63 (TP63) is a nuclear transcription factor of the p53 family that plays a central role in epithelial development, basal cell identity, and lineage specification. In this context, p63 Antibody Microarray Specificity Validated is designed for applications where target specificity is the primary requirement, providing high-confidence detection of TP63 with minimal risk of off-target binding.

p63 antibody, also known as TP63 antibody or Tumor protein 63 antibody in the literature, is widely used as a nuclear epithelial marker. However, because TP63 shares structural homology with related transcription factors, including other p53 family members, antibody cross-reactivity can be a critical concern. A TP63 HuProt-Validated Antibody directly addresses this challenge by demonstrating specificity across the full human proteome rather than a limited validation panel.

The defining differentiator of clone TP63/4379R is its validation using a human protein microarray containing more than 19,000 full-length human proteins. In this system, the antibody produces a dominant top-ranked signal for TP63, with an exceptionally high Z-score and a large S-score separation from all other proteins on the array. This profile indicates not only strong binding to the intended target but also clear discrimination against structurally related and unrelated proteins, establishing a high level of analytical specificity.

This level of validation is fundamentally different from traditional antibody testing approaches. Rather than confirming performance against a small number of known targets, HuProt screening evaluates binding behavior against thousands of proteins simultaneously, providing a global specificity profile. For p63 Antibody Microarray Specificity Validated, this translates to reduced uncertainty in experimental results, particularly in applications where non-specific binding could

confound interpretation, such as nuclear staining, transcription factor analysis, or low-abundance protein detection.

Clone TP63/4379R is a recombinant rabbit monoclonal antibody, offering both high affinity and consistent performance. The recombinant format ensures reproducibility across lots, while the microarray specificity data confirms that this consistency is paired with highly selective target recognition. Together, these features make the antibody especially well suited for experiments requiring clean signal, low background, and confident identification of TP63-positive samples.

The practical impact of this specificity-first design is significant. Researchers can interpret positive signal with greater confidence, minimize time spent troubleshooting non-specific bands or staining, and reduce the likelihood of misleading results caused by off-target interactions. This is particularly important for TP63, where accurate detection is often used to define epithelial lineage, basal cell populations, and tumor characteristics.

Tumor protein 63 antibody clone TP63/4379R represents a high-specificity solution for TP63 detection, combining proteome-scale validation, strong signal-to-background separation, and recombinant monoclonal consistency. Its HuProt-verified performance makes it an optimal choice for studies where specificity is not just preferred, but essential for reliable biological interpretation.

Application Notes

Optimal dilution of the p63 Antibody Microarray Specificity Validated / TP63 HuProt-Validated Antibody antibody should be determined by the researcher.

Immunogen

A portion of amino acids 600-680 was used as the immunogen for the p63 Antibody Microarray Specificity Validated / TP63 HuProt-Validated Antibody.

Storage

Aliquot the recombinant p63 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

TP63 microarray validated antibody, Tumor protein 63 HuProt antibody, p63 specificity validated antibody, TP63 high specificity antibody