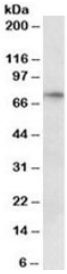
p63 Antibody / Squamous Cell Carcinoma Marker Antibody (R35693)

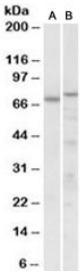
Catalog No.	Formulation	Size
R35693-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Predicted Reactivity	Dog, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	8626
Applications	Western Blot : 0.3-1ug/ml ELISA (peptide) LOD : 1:32000
Limitations	This p63 antibody is available for research use only.



p63 Antibody. Western blot analysis of human heart tissue lysate using a p63 antibody as a squamous cell carcinoma marker demonstrates detection of Tumor protein 63 (TP63) as a band at approximately 77 kDa, consistent with expected TP63 isoforms. The observed band appears distinct with low background, supporting specific detection of TP63 in denatured lysates. Although TP63 expression is typically associated with stratified squamous epithelia, low-level or context-dependent expression can be detected in certain non-squamous tissues, and western blot analysis confirms the presence of TP63 protein in this sample. The clean banding profile supports the use of this p63 antibody for western blot applications requiring reliable detection of TP63 across different tissue types.



p63 Antibody. Western blot analysis of mouse (lane A) and rat (lane B) heart tissue lysates using a p63 antibody as a squamous cell carcinoma marker demonstrates detection of Tumor protein 63 (TP63) as a band at approximately 77 kDa, consistent with expected TP63 isoforms. A distinct band is observed in both species, with slightly stronger signal intensity in rat heart (lane B) compared to mouse (lane A), indicating detectable TP63 expression across these samples. The band appears clean with minimal non-specific background, supporting selective recognition of TP63 in denatured lysates. Although TP63 is classically associated with squamous epithelial tissues, this result confirms that the antibody can detect TP63 protein across species and tissue types in western blot applications.

Description

Tumor protein 63 (TP63) is a nuclear transcription factor of the p53 family that plays a central role in squamous epithelial development, stratification, and maintenance of epithelial identity. p63 Antibody is widely used as a squamous cell carcinoma marker antibody for identifying tumors that arise from or retain characteristics of squamous epithelium, where nuclear TP63 expression reflects lineage-specific transcriptional activity and differentiation status.

p63 antibody, also known as TP63 antibody or Tumor protein 63 antibody in the literature, is strongly expressed in stratified squamous epithelia including skin, esophagus, cervix, and upper aerodigestive tract tissues. As a squamous cell carcinoma marker antibody, p63 produces robust nuclear staining in tumor cells derived from these tissues, allowing clear identification of squamous lineage within heterogeneous tumor samples. The staining is typically diffuse and nuclear, aligning closely with the morphology of squamous tumor nests and sheets.

The squamous carcinoma differentiator is particularly powerful in immunohistochemistry, where interpretation relies on both staining pattern and tissue architecture. p63 Antibody highlights tumor cells with squamous differentiation through strong nuclear positivity, while many glandular or non-epithelial tumors remain negative. This creates a clear contrast that supports tumor classification and helps distinguish squamous cell carcinoma from adenocarcinoma and other malignancies lacking TP63 expression.

At the molecular level, TP63 isoforms, especially deltaNp63, are closely associated with squamous epithelial identity and play a role in maintaining proliferative capacity while regulating differentiation pathways. Persistent nuclear expression of p63 in squamous tumors reflects activation of these transcriptional programs and supports maintenance of the squamous phenotype even in malignant states.

In tissue-based applications, p63 Antibody enables detailed evaluation of tumor differentiation, identification of squamous cell populations, and analysis of tumor heterogeneity within complex samples. The nuclear-restricted signal integrates directly with histological features, allowing confident interpretation of tumor subtype and cellular composition. This is particularly useful when analyzing mixed tumors or borderline lesions where lineage determination is critical.

p63 Antibody as a squamous cell carcinoma marker antibody is especially valuable for studies focused on epithelial tumor biology, differentiation pathways, and TP63-associated oncogenic processes. The combination of strong nuclear staining and lineage specificity provides a reliable readout of squamous differentiation.

Tumor protein 63 antibody serves as a key marker for squamous cell carcinoma, enabling accurate identification of squamous lineage, supporting tumor classification, and providing insight into TP63-driven regulatory mechanisms in epithelial cancers.

Application Notes

Optimal dilution of the p63 Antibody / Squamous Cell Carcinoma Marker Antibody should be determined by the researcher.

1. This p63 antibody will detect isoform 1/4.

Immunogen

Amino acids RNKQQRIKEEGE were used as the immunogen for this p63 Antibody / Squamous Cell Carcinoma Marker Antibody.

Storage

Aliquot and store the p63 antibody at -20oC.

Alternate Names

p63 squamous carcinoma antibody, TP63 SCC marker antibody, Tumor protein 63 squamous tumor antibody, p63 keratinocyte tumor marker antibody