# SANTA CRUZ BIOTECHNOLOGY, INC.

# p63 (D-9): sc-25268



## BACKGROUND

Transcription factor p63 is a widely expressed nuclear protein that exists as 12 isoforms and is a member of the p53 gene family. Alternate promoters encode two main variants, TAp63 and  $\Delta$ Np63, which are further spliced into at least five isoforms, designated  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  and  $\varepsilon$ , due to alternative splicing events at the carboxy-terminus. TAp63 is transcribed from an upstream promoter containing a similar transactivation domain to p53, while  $\Delta$ Np63 is transcribed from a promoter located on intron 3, that results in a unique transactivation domain and distinct biological functions. Considered to be oncogenic,  $\Delta$ Np63 is required for cell growth and survival and can be dominant-negative over TAp63 and p53. TAp63 can transactivate some p53 target genes and is primarily responsible for tubulogenesis and cyst formation.

## **CHROMOSOMAL LOCATION**

Genetic locus: TP63 (human) mapping to 3q28; Trp63 (mouse) mapping to 16 B1.

## SOURCE

p63 (D-9) is a mouse monoclonal antibody raised against amino acids 15-151 of  $\Delta N$  p63 $\alpha$  of human origin.

## PRODUCT

Each vial contains 200  $\mu g\, lgG_{2a}$  kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

p63 (D-9) is available conjugated to agarose (sc-25268 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-25268 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25268 PE), fluorescein (sc-25268 FITC), Alexa Fluor<sup>®</sup> 488 (sc-25268 AF488), Alexa Fluor<sup>®</sup> 546 (sc-25268 AF546), Alexa Fluor<sup>®</sup> 594 (sc-25268 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-25268 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-25268 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-25268 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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#### **APPLICATIONS**

p63 (D-9) is recommended for detection of all p63 isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for p63 siRNA (h): sc-36161, p63 siRNA (m): sc-36162, p63 shRNA Plasmid (h): sc-36161-SH, p63 shRNA Plasmid (m): sc-36162-SH, p63 shRNA (h) Lentiviral Particles: sc-36161-V and p63 shRNA (m) Lentiviral Particles: sc-36162-V.

Molecular Weight of p63 isoforms: 45-77 kDa.

Positive Controls: C32 nuclear extract: sc-2136, HeLa nuclear extract: sc-2120 or A-431 whole cell lysate: sc-2201.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA





p63 (D-9): sc-25268. Western blot analysis of p63 expression in C32 (A), HeLa (B), NIH/3T3 (C) and KNRK (D) nuclear extracts and SK-MEL-28 (E) and AT-3 (F) whole cell lysates.

p63 (D-9): sc-25268. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx ( $\mathbf{A}$ ) and human nasopharynx ( $\mathbf{B}$ ) tissue showing nuclear staining of respiratory epithelial cells.

#### SELECT PRODUCT CITATIONS

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- 4. Troiano, A., et al. 2015. Y-box binding protein-1 is part of a complex molecular network linking  $\Delta Np63\alpha$  to the Pl3K/akt pathway in cutaneous squamous cell carcinoma. J. Cell. Physiol. 230: 2067-2074.
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#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.