# p63 (4A4): sc-8431



The Power to Question

#### **BACKGROUND**

The p53 gene is a widely studied anti-oncogene, or tumor suppressor gene. The p53 gene product can act as a negative regulator of cell growth in response to DNA damage. p73 shares a high degree of homology with p53, and appears to have similar growth inhibiting and apoptosis-promoting functions. However, unlike p53, the expression of p73 is not upregulated in response to DNA damage. p73 can, when overproduced, activate the p53-responsive gene p21. p63 has also been identified based on its similarities with p53. The p63 gene encodes multiple isotypes with variable functions. p63 $\alpha$  (also designated p51B or KET), p63 $\beta$  and p63 $\gamma$  (also designated p51A), as well as corresponding TA\*p63 isoforms, contain transactivation domains which have been shown to transactivate p53 reporter genes and induce apoptosis.  $\Delta N$  p63 isoforms lack the transactivation domain and can act as dominant-negative reagents to inhibit transactivation by p53 and p63.

# **CHROMOSOMAL LOCATION**

Genetic locus: TP63 (human) mapping to 3q28; Trp63 (mouse) mapping to 16 R1

#### **SOURCE**

p63 (4A4) is a mouse monoclonal antibody raised against amino acids 1-205 mapping at the N-terminus of  $\Delta N$  p63 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g \; lg G_{2a}$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-8431 AC, 500  $\mu$ g/0.25 ml agarose in 1 ml; as HRP conjugate for Western blotting, sc-8431 HRP, 200  $\mu$ g/1 ml; and as phycoerythrin (sc-8431 PE), fluorescein (sc-8431 FITC), PerCP (sc-8431 PerCP) or PerCP-Cy5.5 (sc-8431 PCPC5) conjugates for flow cytometry, 100 tests.

# **APPLICATIONS**

p63 (4A4) is recommended for detection of p63 isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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), flow cytometry (1  $\mu$ g per 1 x 106 cells) 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.

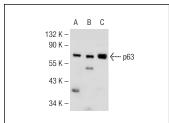
### **STORAGE**

Store at  $4^{\circ}$  C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

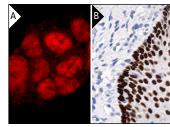
#### **RESEARCH USE**

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

#### **DATA**







p63 (4A4): sc-8431. Immunofluorescence staining of methanol-fixed A-431 cells showing nuclear staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear staining of squamous epithelial cells (B).

# **SELECT PRODUCT CITATIONS**

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