

p63 α (C-12): sc-5301

The Power to Question

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 Δ Np63, which are further spliced into at least five isoforms, designated α , β , γ , δ and ϵ , due to alternative splicing events at the carboxy-terminus. TAp63 is transcribed from an upstream promoter containing a similar transactivation domain to p53, while Δ 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, Δ 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.

SOURCE

p63 α (C-12) is a mouse monoclonal antibody raised against amino acids 513-641 of TA* p63 α of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p63 α (C-12) is available conjugated to agarose (sc-5301 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-5301 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-5301 PE), fluorescein (sc-5301 FITC), Alexa Fluor[®] 488 (sc-5301 AF488), Alexa Fluor[®] 546 (sc-5301 AF546), Alexa Fluor[®] 594 (sc-5301 AF594) or Alexa Fluor[®] 647 (sc-5301 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-5301 AF680) or Alexa Fluor[®] 790 (sc-5301 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

p63 α (C-12) is recommended for detection of TA* p63 α and Δ N p63 α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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) 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 shRNA Plasmid (h): sc-36161-SH and p63 shRNA (h) Lentiviral Particles: sc-36161-V.

Molecular Weight (predicted) of p63 α isoforms: 77/66 kDa.

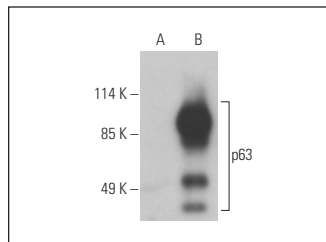
Molecular Weight (observed) of p63 α : 77/55 kDa.

Positive Controls: p63 (h): 293T Lysate: sc-115838, A-431 whole cell lysate: sc-2201 or PC-3 cell lysate: sc-2220.

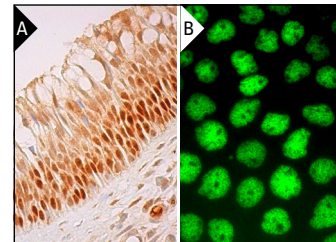
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



p63 α (C-12): sc-5301. Western blot analysis of p63 expression in non-transfected: sc-117752 (A) and human p63 transfected: sc-115838 (B) 293T whole cell lysates. Detection reagent used: m-IgG κ BP-HRP: sc-516102.



p63 α (C-12): sc-5301. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear staining of respiratory epithelial cells (A). Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization (B).

SELECT PRODUCT CITATIONS

- Kass, L., et al. 2004. Association of increased estrogen receptor β 2 expression with parity-induced alterations in the rat mammary gland. *J. Steroid Biochem. Mol. Biol.* 91: 29-39.
- Livera, G., et al. 2008. p63 null mutation protects mouse oocytes from radio-induced apoptosis. *Reproduction* 135: 3-12.
- Kim, S.Y., et al. 2009. Differential expression of p63 isoforms in normal skin and hyperproliferative conditions. *J. Cutan. Pathol.* 36: 825-830.
- Haug, K., et al. 2013. Donor cornea transfer from Optisol GS to organ culture storage: a two-step procedure to increase donor tissue lifespan. *Acta Ophthalmol.* 91: 219-225.
- Molvaer, R.K., et al. 2013. Interactive 3D computer model of the human corneolimbic region: crypts, projections and stem cells. *Acta Ophthalmol.* 91: 457-462.

STORAGE

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

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