

p63 (h): 293T Lysate: sc-115838

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.

REFERENCES

1. De Laurenzi, V., Costanzo, A., Barcaroli, D., Terrinoni, A., Falco, M., Annicchiarico-Petruzzelli, M., Levrero, M. and Melino, G. 1998. Two new p73 splice variants, γ and δ , with different transcriptional activity. *J. Exp. Med.* 188: 1763-1768.
2. King, K.E., Ponnampuruma, R.M., Gerdes, M.J., Tokino, T., Yamashita, T., Baker, C.C. and Weinberg, W.C. 2006. Unique domain functions of p63 isoforms that differentially regulate distinct aspects of epidermal homeostasis. *Carcinogenesis* 27: 53-63.
3. Vakonaki, E., Soultziz, N., Sifakis, S., Papadogianni, D., Koutroulakis, D. and Spandidos, D.A. 2012. Overexpression and ratio disruption of Δ Np63 and TAp63 isoform equilibrium in endometrial adenocarcinoma: correlation with obesity, menopause, and grade I/II tumors. *J. Cancer Res. Clin. Oncol.* 138: 1271-1278.
4. Warner, S.M., Hackett, T.L., Shaheen, F., Hallstrand, T.S., Kicic, A., Stick, S.M. and Knight, D.A. 2013. Transcription factor p63 regulates key genes and wound repair in human airway epithelial basal cells. *Am. J. Respir. Cell Mol. Biol.* 49: 978-988.
5. Zhang, Y., Yan, W. and Chen, X. 2014. P63 regulates tubular formation via epithelial-to-mesenchymal transition. *Oncogene* 33:1548-1557.
6. Pignon, J.C., Grisanzio, C., Geng, Y., Song, J., Shivdasani, R.A. and Signoretti, S. 2013. p63-expressing cells are the stem cells of developing prostate, bladder, and colorectal epithelia. *Proc. Natl. Acad. Sci. USA* 110: 8105-8110.

CHROMOSOMAL LOCATION

Genetic locus: TP73L (human) mapping to 3q28.

PRODUCT

p63 (h): 293T Lysate represents a lysate of human p63 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

p63 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive p63 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.