

p73 Antibody

✓ 100 µl
(10 Western mini-blots)

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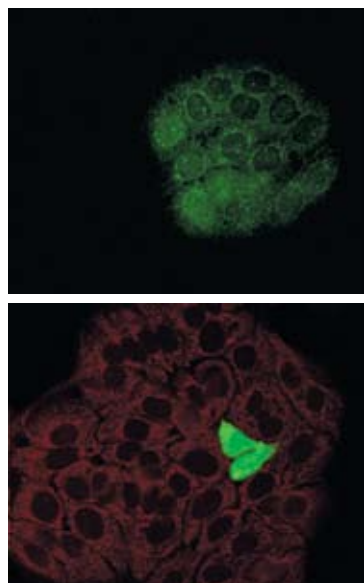
This product is for *in vitro* research use only and is not intended for use in humans or animals.
This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC Transfected	H, (M, Mk)	80 kDa	Rabbit**

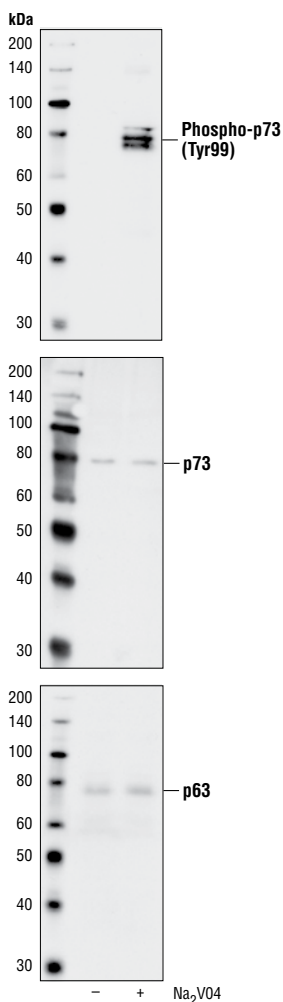
Background: The p53 family member, p73, exists in multiple isoforms/splice variants and can induce apoptosis and cell cycle arrest in response to DNA damage via its activity as a transcription regulator (1-3). Upon DNA damage, p73 is phosphorylated at Tyr99 by c-Abl, causing translocation to the nuclear matrix (4). DNA damage-induced acetylation of p73 at Lys321 by the acetyltransferase p300 has also been reported to enhance transcription of genes including that of p53AIP1 (5). Another report, however, indicates that p300 does not acetylate full length p73 *in vivo* (6).

Specificity/Sensitivity: p73 Antibody detects levels of p73 independent of phosphorylation and acetylation only when derived from a transfected DNA construct

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino-terminus of human p73. Antibodies are purified by protein A and peptide affinity chromatography.



Immunofluorescent detection of endogenous (left, green) and over-expressed p73 (right, green) in HT1376 cells using p73 Antibody. Cells were counterstained with an unrelated control antibody.



Western blot analysis of extracts from HT-1376 cells, untreated or pervanadate-treated (1 mM, 20 minutes), using Phospho-p73 (Tyr99) Antibody #4665 (upper), p73 Antibody (middle), or p63 (4A4) Mouse mAb #4894 antibody (lower).

Entrez-Gene ID # 7161
Swiss-Prot Acc. # O15350

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting 1:1000
Immunofluorescence (IF-IC) 1:50

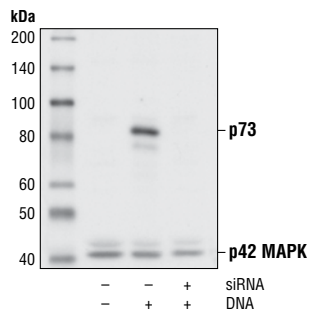
For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

- (1) Kaghad, M. et al. (1997) *Cell* 90, 809-819.
- (2) Jost, C. A. et al. (1997) *Nature* 389, 191-194.
- (3) De Laurenzi, V. D. et al. (1999) *Cell Death Differ.* 6, 389-390.
- (4) Ben-Yehoyada, M. et al. (2003) *J. Biol. Chem.* 278, 34475-34482.
- (5) Costanzo, A. et al. (2002) *Mol. Cell* 9, 175-186.
- (6) Zeng, X. et al. (2001) *J. Biol. Chem.* 276, 48-52.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.



Western blot analysis of extracts from HeLa cells untransfected (lane 1) or transfected with p73 DNA (lanes 2 and 3). Overexpression of p73 can be specifically blocked by co-transfection with p73 siRNA #6371 (lane 3). p73 was detected using p73 Antibody and p42 was detected using p42 MAPK Antibody #9108. The p73 Antibody confirms silencing of exogenous p73 expression and the p42 MAPK Antibody is used to control for loading and siRNA specificity