Phospho-p73 (Tyr99) Antibody

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).

While the sequences surrounding p73 Tyr99 and p63 Tyr149 are very similar, only p73 co-localizes with c-Abl following gamma irradiation, suggesting that p63 is not a c-Abl substrate (7).

Specificity/Sensitivity: Phospho-p73 (Tyr99) Antibody detects endogenous levels of p73 only when phosphorylated at tyrosine 99. This antibody cross-reacts with p63 when phosphorylated at tyrosine 149.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr99 of human p73. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

Recommended Antibody Dilutions:
Western blotting 1:1000
For application specific protocols please see the web page for this product at www.cellsignal.com.

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.

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.