

## Product Information

### Anti-YAP1 (C-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **Y4770**

#### Product Description

Anti-YAP1 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 442-454 located at the C-terminus of human YAP1 (Gene ID: 10413), conjugated to KLH. The sequence is identical in mouse, bovine, and dog YAP1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-YAP1 (C-terminal) specifically recognizes human YAP1 by immunoblotting (~65 kDa). Detection of the YAP1 band is specifically inhibited with the immunizing peptide.

YAP1 (Yes-associated protein 1, YAP, YAP2, YAP65) is a modular adapter protein with multiple protein interaction domains that was originally identified based on its interaction with Src-family tyrosine kinase c-Yes.<sup>1</sup> YAP1 plays an important role as a transcription co-activator in regulating gene expression through direct association with a wide range of transcription factors, including Runx2 and PPAR $\gamma$ .<sup>2</sup> In addition to a SH3-binding motif, YAP1 contains a proline-rich amino terminus, a WW domain, a coiled-coil and a PDZ-binding motif at the extreme C-terminus. YAP1 binds to p73 through its WW domain and the PPPY motif of p73. This interaction is required for the ability of YAP1 to co-activate p73-responsive genes.<sup>3</sup> In response to DNA damage, YAP1 translocates to the nucleus in a p73-dependent manner. In the nucleus, YAP1 promotes p73-dependent apoptosis through the specific and selective co-activation of p53AIP1, an apoptotic p73 target gene.<sup>2</sup> YAP1 has been shown to stabilize p73 by preventing Itch-mediated ubiquitination of p73.<sup>4</sup> It also contains a 14-3-3 interacting motif. Upon phosphorylation by Akt at Ser<sup>127</sup>, 14-3-3 is recruited and this promotes YAP1 localization to the cytoplasm, resulting in loss of co-activator function in the nucleus.<sup>5</sup> Inhibition of Akt potentiates the nuclear re-localization of YAP1 to induce apoptosis by p73.<sup>6</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

#### Product Profile

Immunoblotting: a working concentration of 0.5-1  $\mu$ g/mL is recommended using HEK-293T cells co-transfected with human YAP1 and c-Abl.

**Note:** In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

#### References

1. Sudol, M., *Oncogene*, **9**, 2145-2152 (1994).
2. Hong, J-H, Yaffe, M.B., *Cell Cycle*, **5**, 176-179 (2006).
3. Strano, S., et al., *J. Biol. Chem.*, **276**, 15165-15173 (2001).
4. Levy, D., et al., *Cell Death Differ.*, **14**, 743-7751 (2007).
5. Basu, S., et al., *Mol. Cell*, **11**, 11-23 (2003).
6. Strano, S., et al., *Mol. Cell*, **18**, 447-459 (2005).

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