

Product Information

Anti-E6AP antibody, Mouse monoclonal

clone E6AP-330, purified from hybridoma cell culture

Product Number **E8655**

Product Description

Anti-E6AP antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the E6AP-330 hybridoma produced by the fusion of mouse myeloma cells (NS1 cells) and splenocytes from BALB/c mice immunized with the human full-length recombinant E6AP. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Monoclonal Anti-E6AP recognizes human, monkey, rat and mouse (approx. 100 kDa). The antibody may be used in ELISA, immunoblotting, immunoprecipitation, and immunocytochemistry.

E6AP belongs to the E3 ubiquitin ligase family and is encoded by the UB3A gene located in chromosome region 15q11-q13. Mutations in this gene or loss of its expression may lead to the Angelman syndrome (AS) that is characterized by neuro developmental impairment.¹⁻³ E6AP protein together with ubiquitin activating enzyme E1 and ubiquitin conjugating enzyme E2, catalyzes the ubiquitination of different protein substrates for targeted degradation via the 26S proteasome. E3 ubiquitin ligases are enzymes that determine the specificity of protein substrates to be marked for degradation. E6AP was originally identified as the ubiquitin-protein ligase involved in human papillomavirus (HPV) E6-mediated p53 degradation and has since been shown to act as an E3 ubiquitin-protein ligase in the ubiquitination of several other protein substrates. E6AP complexes with the E6 viral protein in cells infected with papilloma virus (HPVs). This complex binds to the central region of p53 and as a consequence p53 is ubiquitinated and targeted to the proteasome. Low expression of p53 may lead to several pathological events such as cervical tumor.¹⁻⁴

Monoclonal antibodies to E6AP are an important tool for studying E6AP and its role in protein degradation.

Reagent

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

Antibody Concentration: Approx. 2 mg/ml.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the 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 prolonged 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1-2 µg/ml is recommended using total cell extract from 293T cells.

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

References

1. Scheffner, M., et al., *Cell*, **75**, 495-505 (1993).
2. Tommasino, M., et al., *Human Mut.*, **21**, 307-312 (2003).
3. Dan, B., and Boyd, S.G., *Neuroped.*, **34**, 169-176 (2003).
4. Sun, Y., *Cancer Biol.*, **2**, 623-629 (2003).

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