

Product Information

MONOCLONAL ANTI-p107

Clone KAB6

Purified Mouse Immunoglobulin

Product Number **P 4360**

Product Description

Monoclonal Anti-p107 (mouse IgG1 isotype) is produced by immunizing mice with a GST fusion protein to the N-terminus of p107.

Monoclonal Anti-p107 recognizes both phosphorylated and non-phosphorylated forms of p107 by immunoblotting. It is reactive in human and mouse.

p107 is a cellular protein that is related both in structure and function to the retinoblastoma (Rb) tumor suppressor protein and p130 (collectively known as pocket proteins). These proteins contain a "pocket" domain comprised of two regions, the A and B pockets that functionally interact with the transcription factors E2F and DP-1 among other proteins.^{1, 2, 3, 4, 5} p107 regulates the activity of E2F transcription factors. p107 binds and converts E2F transcription factors from transcriptional activators to transcriptional repressors. E2F transcription factors regulate the expression of a number of genes that are important in cell proliferation, particularly those involved in the progression through G1 and into the S-phase of the cell cycle. p107 regulates the cell cycle negatively by down-regulating the growth response depending upon the phosphorylation state of the "pocket".

p107 is less frequently found in mutated human tumors cells than its related protein, retinoblastoma (Rb).⁶ p107 and its related proteins bind and regulate the activity of various proteins encoded by the small DNA tumor viruses such as adenovirus and SV-40.^{6, 7}

Reagent

Monoclonal Anti-p107 is supplied as 1 mg/ml of antiserum in phosphate buffered saline containing 0.08% sodium azide.

Storage/Stability

For continuous use, store at 2 °C to 8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Avoid repeated freezing and thawing. Do not store in a frost-free freezer. 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.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Product Profile

For immunoblotting, a working dilution of 1:1,000 is recommended using human C33A cervical carcinoma cells. A band of approximately 107 kDa is detected.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentrations by titration test.

References

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7. Ludlow, J.W., and Skuse, G.R., *Virus Res.*, **35**, 113-121 (1995).

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