

Product Information

Anti-ASF1 antibody, Mouse monoclonal
clone 4A1/3, purified from hybridoma cell culture

Catalog Number **A5236**

Product Description

Monoclonal Anti-ASF1 (mouse IgG2a isotype) is derived from the hybridoma 4A1/3 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with an ASF1A (GeneID: 25842) fusion protein. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-ASF1 recognizes human and mouse ASF1. The antibody may be used in several immunochemical techniques including immunoblotting (~23 kDa).

ASF1 encodes a member of the H3/H4 family of histone chaperone proteins and is similar to the anti-silencing function-1 gene in yeast. The protein is a key component of a histone donor complex that functions in nucleosome assembly. It interacts with histones H3 and H4, and functions together with a chromatin assembly factor 1 (CAF-1) during DNA replication and repair.^{1,2} ASF1 also contributes to genome stability during S phase.³ Cells lacking ASF1 were found to be sensitive to a number of genotoxic agents that predominantly cause DNA damage by interfering with DNA replication fork progression such as hydroxyurea and camptothecin.^{1,2,4}

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.

Storage/Stability

Store at -20 °C. For continuous use, product may be stored at 2-8 °C for up to one month. For extended storage, freeze at -20 °C 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 concentration of 2-4 µg/mL is recommended using a whole extract of human Jurkat or Raji cells.

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

References

1. Tyler, J.K., et al., *Nature*, **402**, 555-560 (1999).
2. Franco, A.A., et al., *Genes. Dev.*, **19**, 1365-1375 (2005).
3. Ozdemir, A., et al., *Cell Cycle*, **5**, 2602-2608 (2008).
4. Linger, J., and Tyler, J.K., *Genetics*, **171**, 1513-1522 (2005).

RC,GG,SG,ST,TD,KAA,PHC 08/20-1