

PRODUCT DATA SHEET

Bioworld Technology,Inc.

ASF1A polyclonal antibody

Catalog: BS61519 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

ASF1 was first identified in S. cerevisiae based on its ability to de-repress transcriptional silencing when overexpressed. While only one gene exists in yeast and Drosophila, mammalian cells contain the two highly homologous ASF1A and ASF1B genes. ASF1A and ASF1B function as histone chaperones, delivering histone H3/H4 dimers to CAF-1 or HIRA histone deposition complexes facilitate replication-coupled and replicato tion-independent nucleosome assembly on DNA. Both ASF1A and ASF1B bind to CAF-1, but only ASF1A binds to HIRA. In addition to playing a role in DNA replication and gene silencing, ASF1 functions in DNA damage repair, genome stability and cellular senescence. Deletion of ASF1 in yeast and Drosophila confers sensitivity to various DNA damaging agents and inhibitors of DNA replication, increases genomic instability and sister chromatid exchange, and activates the DNA damage checkpoint. Depletion of both ASF1A and ASF1B in mammalian cells results in the accumulation of cells in S phase, increased phosphorylation of H2A.X, centrosome amplification and apoptosis. ASF1A is required for the formation of senescence-associated heterochromatin foci (SAHF), with overexpression of ASF1A inducing senescence in primary cells. Both ASF1A and ASF1B are phosphorylated in S phase by the Tousled-like kinases TLK1 and TLK2, and are dephosphorylated when TLK1 and TLK2 are inactivated by Chk1 kinase in response to replicative stress. The function of ASF1 phosphorylation is not yet understood.

Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.3.

Molecular Weight:

~ 20 kDa

Swiss-Prot:

O9Y294

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)

Applications:

WB: 1:500~1:1000

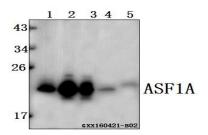
Storage&Stability:

Store at $4 \,\mathrm{C}$ short term. Aliquot and store at $-20 \,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

ASF1A polyclonal antibody detects endogenous levels of ASF1A protein.

DATA:



Western blot (WB) analysis of ASF1A polyclonal antibody at 1:500 di-

lution

Lane1:L02 whole cell lysate(40ug)

Lane2:A549 whole cell lysate(40ug)

Lane3:MCF-7 whole cell lysate(40ug)

Lane4:The lung tissue lysate of Mouse(40ug)

Lane5:The lung tissue lysate of Rat(40ug)

Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841

Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



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MN 55416,USA.

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Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

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Email: <u>info@biogot.com</u>
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Fax: 0086-025-68035151