

ASF1A

Purified Mouse Monoclonal Antibody Catalog # AO2630a

# **Product Information**

Application	WB, IHC, ICC, E
Primary Accession	<u>Q9Y294</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2A5F8
Isotype	Mouse IgG1
Calculated MW	22969
Immunogen	Purified recombinant fragment of human ASF1A (AA: 1-204) expressed in E.
Formulation	Coli. Purified antibody in PBS with 0.05% sodium azide

## **Additional Information**

Gene ID	25842
Other Names	CIA; CGI-98; HSPC146
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ASF1A is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	ASF1A {ECO:0000303 PubMed:10759893, ECO:0000312 HGNC:HGNC:20995}
Function	Histone chaperone that facilitates histone deposition and histone exchange and removal during nucleosome assembly and disassembly (PubMed: <u>10759893</u> , PubMed: <u>11897662</u> , PubMed: <u>12842904</u> , PubMed: <u>14718166</u> , PubMed: <u>15664198</u> , PubMed: <u>16151251</u> , PubMed: <u>21454524</u> ). Cooperates with chromatin assembly factor 1 (CAF-1) to promote replication-dependent chromatin assembly and with HIRA to promote replication-independent chromatin assembly (PubMed: <u>11897662</u> , PubMed: <u>14718166</u> , PubMed: <u>15664198</u> ). Promotes homologous recombination-mediated repair of double-strand breaks (DSBs) at stalled or

	collapsed replication forks: acts by mediating histone replacement at DSBs, leading to recruitment of the MMS22L-TONSL complex and subsequent loading of RAD51 (PubMed: <u>29478807</u> ). Also involved in the nuclear import of the histone H3-H4 dimer together with importin-4 (IPO4): specifically recognizes and binds newly synthesized histones with the monomethylation of H3 'Lys-9' and acetylation at 'Lys-14' (H3K9me1K14ac) marks, and diacetylation at 'Lys-5' and 'Lys-12' of H4 (H4K5K12ac) marks in the cytosol (PubMed: <u>21454524</u> , PubMed: <u>29408485</u> ). Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit (PubMed: <u>15621527</u> ).
Cellular Location	Nucleus. Chromosome
Tissue Location	Ubiquitously expressed.

#### References

1.Science. 2014 Aug 15;345(6198):822-5. 2.PLoS One. 2012;7(1):e27759.

#### Images



Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Figure 2:Western blot analysis using ASF1A mAb against human ASF1A (AA: 1-204) recombinant protein. (Expected MW is 48.9 kDa)

Figure 3:Western blot analysis using ASF1A mAb against HEK293 (1) and ASF1A (AA: 1-204)-hIgGFc transfected HEK293 (2) cell lysate.



Figure 4:Flow cytometric analysis of Hela cells using ASF1A mouse mAb (green) and negative control (red).

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