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ASF1A

Purified Mouse Monoclonal Antibody
Catalog # AO2630a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q9Y294
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. Coli.
Formulation	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:10759893, PubMed:11897662, PubMed:12842904, PubMed:14718166, PubMed:15664198, PubMed:16151251, PubMed:21454524). Cooperates with chromatin assembly factor 1 (CAF-1) to promote replication-dependent chromatin assembly and with HIRA to promote replication-independent chromatin assembly (PubMed:11897662, PubMed:14718166, PubMed:15664198). 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:29478807). 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:21454524, PubMed:29408485). Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit (PubMed:15621527).

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

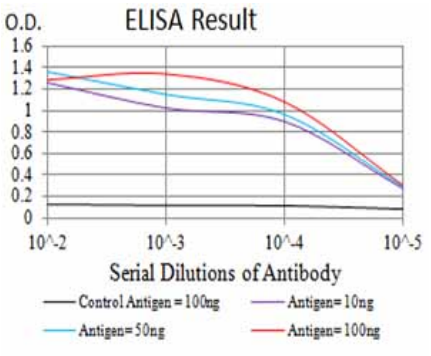


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

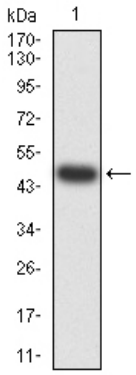
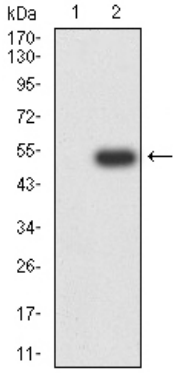


Figure 2:Western blot analysis using ASF1A mAb against human ASF1A (AA: 1-204) recombinant protein. (Expected MW is 48.9 kDa)

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



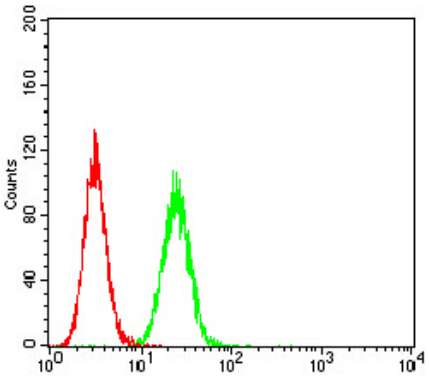


Figure 4:Flow cytometric analysis of Hela cells using ASF1A mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.