

Asf1a Polyclonal Antibody

Catalog # AP68551

Product Information

Application	WB, IF
Primary Accession	<u>Q9Y294</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22969

Additional Information

Gene ID	25842
Other Names	ASF1A; CGI-98; HSPC146; Histone chaperone ASF1A; Anti-silencing function protein 1 homolog A; hAsf1; hAsf1a; CCG1-interacting factor A; CIA; hCIA
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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: <u>15621527</u>).
Cellular Location	Nucleus. Chromosome
Tissue Location	Ubiquitously expressed.

Background

Histone chaperone that facilitates histone deposition and histone exchange and removal during nucleosome assembly and disassembly. Cooperates with chromatin assembly factor 1 (CAF-1) to promote replication-dependent chromatin assembly and with HIRA to promote replication-independent chromatin assembly. Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit.

Images



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