

Rabbit Anti-ASF1A antibody

SL3777R

Product Name:	ASF1A
Chinese Name:	细胞衰老相关蛋白ASF1A抗体
Alias:	Anti silencing function 1A; ASF1 anti silencing function 1 homolog A; CCG1 interacting factor A; CG9383; CGI 98; CGI98 protein; CIA; dASF1; hAsf1; hAsf1a; hCIA; Histone chaperone ASF1A; HSPC146; ASF1A_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ASF1A:101-204/204
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	ASF1a belongs to the H3/H4 family of histone chaperone proteins. 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 during DNA replication, repair and silencing.

Function:

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.

Subunit:

Interacts with histone H3 (including both histone H3.1 and H3.3) and histone H4. Interacts with the CHAF1A, CHAF1B and RBBP4 subunits of the CAF-1 complex. Interacts with CABIN1, HAT1, HIRA, NASP, TAF1, TLK1, TLK2 and UBN1. Interacts with CDAN1. Found in a cytosolic complex with CDAN1, ASF1B, IPO4 and histones H3.1 and H4.

Subcellular Location:

Nucleus.

Tissue Specificity:

Ubiquitously expressed.

Post-translational modifications:

Phosphorylated by TLK1 and TLK2. Highly phosphorylated in S-phase and at lower levels in M-phase. TLK2-mediated phosphorylation at Ser-192 prevents proteasomedependent degradation.

Similarity:

Belongs to the ASF1 family.

SWISS:

O9Y294

Gene ID:

25842

Database links:

Entrez Gene: 25842Human

Entrez Gene: 66403Mouse

Entrez Gene: 294408Rat

Omim: 609189Human

SwissProt: Q9Y294Human

SwissProt: Q9CQE6Mouse

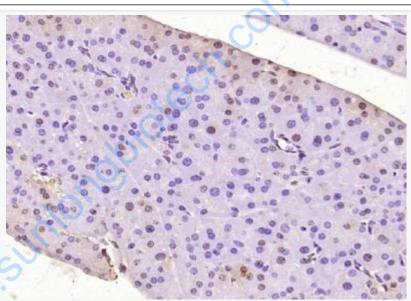
Unigene: 292316Human

Unigene: 272989 Mouse

Important Note:

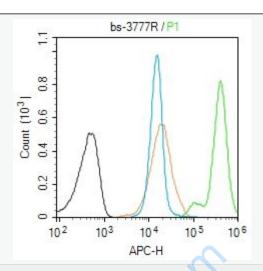
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ASF1a能够促进细胞衰老并且是与衰老有关的细胞周期停滞所必须的。HIRA/ASF1a介导的SAHF的形成过程直接促进细胞脱离细胞周期循环进入衰老阶段。研究人员还推测HIRA和ASF1a的改变可能使细胞无法脱离细胞周期并可能导致癌症的发生。



Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse pancreas tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ASF1A) Polyclonal Antibody, Unconjugated (SL3777R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-ASF1A antibody (SL3777R)

Dilution: $1\mu g / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.