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Goat Anti-ASF1A Antibody

Peptide-affinity purified goat antibody
Catalog # AF1119b

Specification

Goat Anti-ASF1A Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9Y294
Other Accession	NP_054753, 25842, 66403 (mouse), 294408 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**22969**

Goat Anti-ASF1A Antibody - Additional Information

Gene ID 25842

Other Names
Histone chaperone ASF1A, Anti-silencing function protein 1 homolog A, hAsf1, hAsf1a, CCG1-interacting factor A, CIA, hCIA, ASF1A

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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
Goat Anti-ASF1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ASF1A Antibody - 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.

Goat Anti-ASF1A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ASF1A Antibody - Images

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AF1119b (1 µg/ml) staining of Jurkat cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ASF1A Antibody - Background

This gene encodes a member of the H3/H4 family of histone chaperone proteins and is similar to the anti-silencing function-1 gene in yeast. 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 and repair.

Goat Anti-ASF1A Antibody - References

Replication stress interferes with histone recycling and predeposition marking of new histones. Jasencakova Z, et al. Mol Cell, 2010 Mar 12. PMID 20227376.
Phosphorylation-mediated control of histone chaperone ASF1 levels by Tousled-like kinases. Pilyugin M, et al. PLoS One, 2009 Dec 16. PMID 20016786.
Common variants at ten loci influence QT interval duration in the QTGEN Study. Newton-Cheh C, et al. Nat Genet, 2009 Apr. PMID 19305408.
Human UBN1 is an ortholog of yeast Hpc2p and has an essential role in the HIRA/ASF1a chromatin-remodeling pathway in senescent cells. Banumathy G, et al. Mol Cell Biol, 2009 Feb. PMID 19029251.
Varicella-zoster virus immediate-early 63 protein interacts with human antisilencing function 1 protein and alters its ability to bind histones h3.1 and h3.3. Ambagala AP, et al. J Virol, 2009 Jan. PMID 18971269.