

Goat Anti-ASF1A / HSPC146 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1119a**Specification**

Goat Anti-ASF1A / HSPC146 Antibody - Product Information

Application	WB, E
Primary Accession	O9Y294
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 / HSPC146 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 / HSPC146 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ASF1A / HSPC146 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](http://www.uniprot.org/citations/10759893)), PubMed:[11897662](http://www.uniprot.org/citations/11897662), PubMed:[12842904](http://www.uniprot.org/citations/12842904), PubMed:[14718166](http://www.uniprot.org/citations/14718166), PubMed:[15664198](http://www.uniprot.org/citations/15664198), PubMed:[16151251](http://www.uniprot.org/citations/16151251), PubMed:[21454524](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11897662), PubMed:[14718166](http://www.uniprot.org/citations/14718166), PubMed:[15664198](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21454524), PubMed:[29408485](http://www.uniprot.org/citations/29408485)). Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit (PubMed:[15621527](http://www.uniprot.org/citations/15621527)).

Cellular Location

Nucleus. Chromosome

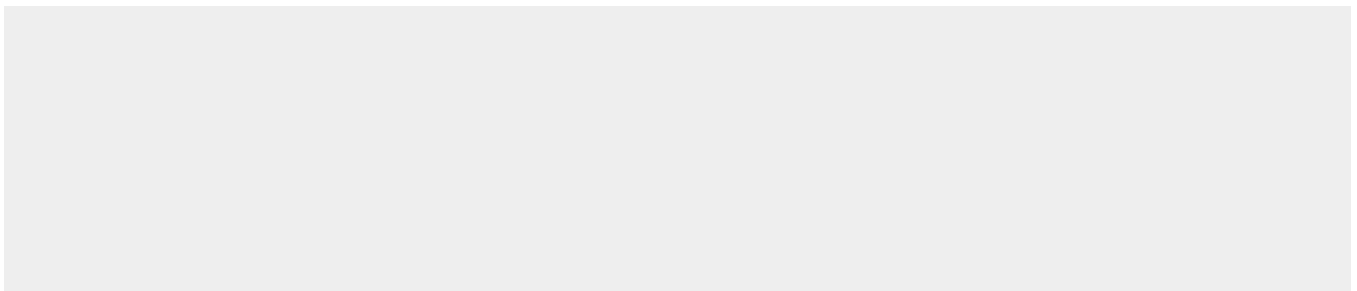
Tissue Location

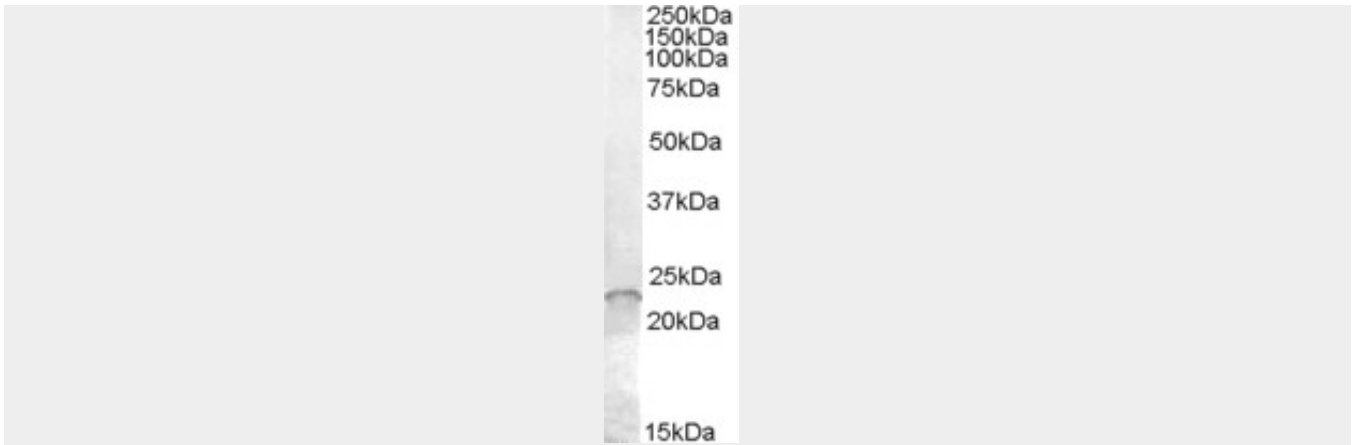
Ubiquitously expressed.

Goat Anti-ASF1A / HSPC146 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 Cytometry](#)
- [Cell Culture](#)

Goat Anti-ASF1A / HSPC146 Antibody - Images



AF1119a (0.01 $\mu\text{g/ml}$) staining of Jurkat cell lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ASF1A / HSPC146 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 / HSPC146 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.