

Goat Anti-FACT / SUPT16H Antibody

Peptide-affinity purified goat antibody Catalog # AF1394a

Specification

Goat Anti-FACT / SUPT16H Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>O9Y5B9</u> <u>NP_009123</u>, <u>11198</u> Human Mouse, Pig, Cow Goat Polyclonal 100ug/200ul IgG 119914

Goat Anti-FACT / SUPT16H Antibody - Additional Information

Gene ID 11198

Other Names

FACT complex subunit SPT16, Chromatin-specific transcription elongation factor 140 kDa subunit, FACT 140 kDa subunit, FACTp140, Facilitates chromatin transcription complex subunit SPT16, hSPT16, SUPT16H, FACT140, FACTP140

Format

0.5 mg lgG/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-FACT / SUPT16H Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FACT / SUPT16H Antibody - Protein Information

Name SUPT16H

Synonyms FACT140, FACTP140

Function

Component of the FACT complex, a general chromatin factor that acts to reorganize nucleosomes. The FACT complex is involved in multiple processes that require DNA as a template such as mRNA



elongation, DNA replication and DNA repair. During transcription elongation the FACT complex acts as a histone chaperone that both destabilizes and restores nucleosomal structure. It facilitates the passage of RNA polymerase II and transcription by promoting the dissociation of one histone H2A-H2B dimer from the nucleosome, then subsequently promotes the reestablishment of the nucleosome following the passage of RNA polymerase II. The FACT complex is probably also involved in phosphorylation of 'Ser-392' of p53/TP53 via its association with CK2 (casein kinase II).

Cellular Location Nucleus. Chromosome. Note=Colocalizes with RNA polymerase II on chromatin. Recruited to actively transcribed loci

Tissue Location Ubiquitous..

Goat Anti-FACT / SUPT16H Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-FACT / SUPT16H Antibody - Images



AF1394a (0.1 μ g/ml) staining of HeLa cell lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-FACT / SUPT16H Antibody - Background

Transcription of protein-coding genes can be reconstituted on naked DNA with only the general transcription factors and RNA polymerase II. However, this minimal system cannot transcribe DNA packaged into chromatin, indicating that accessory factors may facilitate access to DNA. One such factor, FACT (facilitates chromatin transcription), interacts specifically with histones H2A/H2B to effect nucleosome disassembly and transcription elongation. FACT is composed of an 80 kDa subunit and a 140 kDa subunit; this gene encodes the 140 kDa subunit.

Goat Anti-FACT / SUPT16H Antibody - References



Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

FACT-mediated exchange of histone variant H2AX regulated by phosphorylation of H2AX and ADP-ribosylation of Spt16. Heo K, et al. Mol Cell, 2008 Apr 11. PMID 18406329.

Histone H2A monoubiquitination represses transcription by inhibiting RNA polymerase II transcriptional elongation. Zhou W, et al. Mol Cell, 2008 Jan 18. PMID 18206970.

Distinct class of putative non-conserved promoters in humans: comparative studies of alternative promoters of human and mouse genes. Tsuritani K, et al. Genome Res, 2007 Jul. PMID 17567985. Human SSRP1 has Spt16-dependent and -independent roles in gene transcription. Li Y, et al. J Biol Chem, 2007 Mar 9. PMID 17209051.