



href="http://www.uniprot.org/citations/10757782" target="\_blank">10757782</a>, PubMed:<a href="http://www.uniprot.org/citations/10912001" target="\_blank">10912001</a>, PubMed:<a href="http://www.uniprot.org/citations/11112772" target="\_blank">11112772</a>, PubMed:<a href="http://www.uniprot.org/citations/11553615" target="\_blank">11553615</a>, PubMed:<a href="http://www.uniprot.org/citations/12653964" target="\_blank">12653964</a>, PubMed:<a href="http://www.uniprot.org/citations/12718890" target="\_blank">12718890</a>, PubMed:<a href="http://www.uniprot.org/citations/15136722" target="\_blank">15136722</a>, PubMed:<a href="http://www.uniprot.org/citations/15380072" target="\_blank">15380072</a>, PubMed:<a href="http://www.uniprot.org/citations/9450929" target="\_blank">9450929</a>, PubMed:<a href="http://www.uniprot.org/citations/9857195" target="\_blank">9857195</a>). DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of RNGTT/CAP1A (PubMed:<a href="http://www.uniprot.org/citations/10075709" target="\_blank">10075709</a>, PubMed:<a href="http://www.uniprot.org/citations/10421630" target="\_blank">10421630</a>, PubMed:<a href="http://www.uniprot.org/citations/10757782" target="\_blank">10757782</a>, PubMed:<a href="http://www.uniprot.org/citations/10912001" target="\_blank">10912001</a>, PubMed:<a href="http://www.uniprot.org/citations/11112772" target="\_blank">11112772</a>, PubMed:<a href="http://www.uniprot.org/citations/11553615" target="\_blank">11553615</a>, PubMed:<a href="http://www.uniprot.org/citations/12653964" target="\_blank">12653964</a>, PubMed:<a href="http://www.uniprot.org/citations/12718890" target="\_blank">12718890</a>, PubMed:<a href="http://www.uniprot.org/citations/15136722" target="\_blank">15136722</a>, PubMed:<a href="http://www.uniprot.org/citations/15380072" target="\_blank">15380072</a>, PubMed:<a href="http://www.uniprot.org/citations/9450929" target="\_blank">9450929</a>, PubMed:<a href="http://www.uniprot.org/citations/9857195" target="\_blank">9857195</a>). DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to enhance transcriptional pausing at sites proximal to the promoter (PubMed:<a href="http://www.uniprot.org/citations/10075709" target="\_blank">10075709</a>, PubMed:<a href="http://www.uniprot.org/citations/10199401" target="\_blank">10199401</a>, PubMed:<a href="http://www.uniprot.org/citations/10757782" target="\_blank">10757782</a>, PubMed:<a href="http://www.uniprot.org/citations/10912001" target="\_blank">10912001</a>, PubMed:<a href="http://www.uniprot.org/citations/11112772" target="\_blank">11112772</a>, PubMed:<a href="http://www.uniprot.org/citations/11553615" target="\_blank">11553615</a>, PubMed:<a href="http://www.uniprot.org/citations/12653964" target="\_blank">12653964</a>, PubMed:<a href="http://www.uniprot.org/citations/12718890" target="\_blank">12718890</a>, PubMed:<a href="http://www.uniprot.org/citations/15136722" target="\_blank">15136722</a>, PubMed:<a href="http://www.uniprot.org/citations/15380072" target="\_blank">15380072</a>, PubMed:<a href="http://www.uniprot.org/citations/9450929" target="\_blank">9450929</a>, PubMed:<a href="http://www.uniprot.org/citations/9857195" target="\_blank">9857195</a>). Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex (PubMed:<a href="http://www.uniprot.org/citations/10075709" target="\_blank">10075709</a>, PubMed:<a href="http://www.uniprot.org/citations/10199401" target="\_blank">10199401</a>, PubMed:<a href="http://www.uniprot.org/citations/10421630" target="\_blank">10421630</a>, PubMed:<a href="http://www.uniprot.org/citations/10757782" target="\_blank">10757782</a>, PubMed:<a href="http://www.uniprot.org/citations/10912001" target="\_blank">10912001</a>, PubMed:<a href="http://www.uniprot.org/citations/11112772" target="\_blank">11112772</a>, PubMed:<a href="http://www.uniprot.org/citations/11553615" target="\_blank">11553615</a>, PubMed:<a href="http://www.uniprot.org/citations/12653964" target="\_blank">12653964</a>, PubMed:<a href="http://www.uniprot.org/citations/12718890" target="\_blank">12718890</a>, PubMed:<a href="http://www.uniprot.org/citations/15136722" target="\_blank">15136722</a>, PubMed:<a href="http://www.uniprot.org/citations/15380072" target="\_blank">15380072</a>, PubMed:<a href="http://www.uniprot.org/citations/9450929" target="\_blank">9450929</a>, PubMed:<a href="http://www.uniprot.org/citations/9857195" target="\_blank">9857195</a>). DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIS/S-II (PubMed:<a href="http://www.uniprot.org/citations/16214896" target="\_blank">16214896</a>). TFIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic nuclease activity of the enzyme (PubMed:<a href="http://www.uniprot.org/citations/16214896" target="\_blank">16214896</a>). Cleavage of blocked transcripts by RNA polymerase II promotes the resumption of transcription from the new 3' terminus and may allow repeated attempts at

transcription through natural pause sites (PubMed:<a href="http://www.uniprot.org/citations/16214896" target="\_blank">16214896</a>). Following phosphorylation by CDK9, DSIF can also positively regulate transcriptional elongation (PubMed:<a href="http://www.uniprot.org/citations/16427012" target="\_blank">16427012</a>). Required for the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator, Tat (PubMed:<a href="http://www.uniprot.org/citations/10393184" target="\_blank">10393184</a>, PubMed:<a href="http://www.uniprot.org/citations/10454543" target="\_blank">10454543</a>, PubMed:<a href="http://www.uniprot.org/citations/11809800" target="\_blank">11809800</a>, PubMed:<a href="http://www.uniprot.org/citations/9514752" target="\_blank">9514752</a>). DSIF acts to suppress transcriptional pausing in transcripts derived from the HIV-1 LTR and blocks premature release of HIV-1 transcripts at terminator sequences (PubMed:<a href="http://www.uniprot.org/citations/11112772" target="\_blank">11112772</a>, PubMed:<a href="http://www.uniprot.org/citations/14701750" target="\_blank">14701750</a>).

### Cellular Location

Nucleus.

### Tissue Location

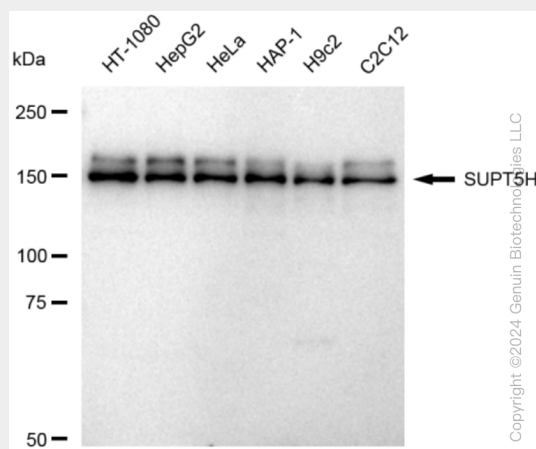
Ubiquitously expressed.

## KD-Validated Anti-SUPT5H Rabbit Monoclonal Antibody - Protocols

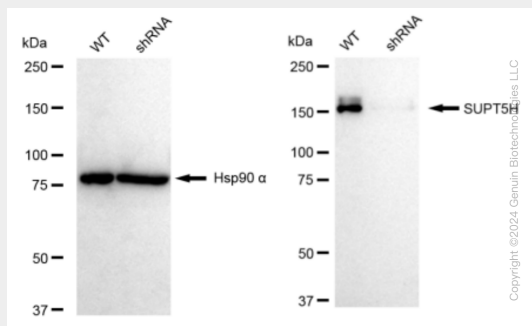
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

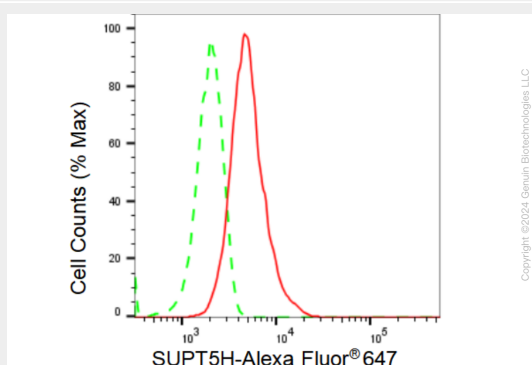
## KD-Validated Anti-SUPT5H Rabbit Monoclonal Antibody - Images



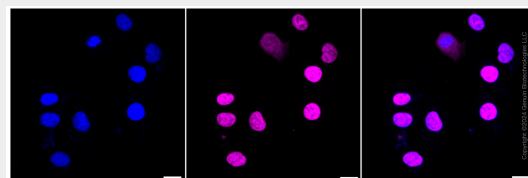
Western blotting analysis using anti-SUPT5H antibody (Cat#AGI1413). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SUPT5H antibody (Cat#AGI1413, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-SUPT5H antibody (Cat#AGI1413). SUPT5H expression in wild type (WT) and SUPT5H shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-SUPT5H antibody (Cat#AGI1413, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of SUPT5H expression in HT-1080 cells using SUPT5H antibody (Cat#AGI1413, 1:2,000). Green, isotype control; red, SUPT5H.



Immunocytochemical staining of HT-1080 cells with SUPT5H antibody (Cat#AGI1413, 1:1,000). Nuclei were stained blue with DAPI; SUPT5H was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.