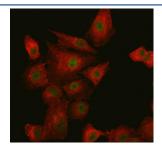


SUPT20H Antibody / Transcription factor SPT20 homolog (FY12840)

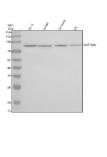
| Catalog No. | Formulation | Size |
|-------------|--|--------|
| FY12840 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml | 100 ug |

Bulk quote request

| Availability | 1-2 days |
|--------------------|---|
| Species Reactivity | Human, Rat |
| Format | Lyophilized |
| Clonality | Polyclonal (rabbit origin) |
| Isotype | Rabbit IgG |
| Purity | Immunogen affinity purified |
| Buffer | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| UniProt | Q8NEM7 |
| Localization | Nuclear |
| Applications | Western Blot : 0.25-0.5ug/ml Immunocytochemistry/Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml |
| Limitations | This SUPT20H antibody is available for research use only. |



Immunofluorescent staining of SUPT20H using anti-SUPT20H antibody (green) and anti-Beta Tubulin antibody (red). SUPT20H was detected in an immunocytochemical section of cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-SUPT20H antibody and mouse anti-Beta Tubulin antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG and Cy3 Conjugated Goat Anti-Mouse IgG were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of SUPT20H using anti-SUPT20H antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human PC-3 whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: rat testis tissue lysates, Lane 4: rat C6 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SUPT20H antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit lgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for SUPT20H at approximately 86 kDa. The expected molecular weight of SUPT20H is ~86 kDa.

Description

SUPT20H antibody detects Transcription factor SPT20 homolog, a multifunctional protein involved in transcriptional regulation, chromatin remodeling, and proteostasis. Encoded by the SUPT20H gene on chromosome 13q12.3, this evolutionarily conserved factor plays dual roles as a component of transcriptional coactivator complexes and as a regulator of protein homeostasis in the cytoplasm. SUPT20H participates in the regulation of RNA polymerase II-mediated transcription, chromatin accessibility, and cellular stress response.

Structurally, SUPT20H contains conserved coiled-coil and low-complexity regions that facilitate interactions with chromatin-associated proteins, transcription factors, and the proteasome. It is a functional homolog of yeast SPT20, a core subunit of the SAGA (Spt-Ada-Gcn5 acetyltransferase) transcriptional coactivator complex that links histone acetylation to gene activation. In mammalian systems, SUPT20H contributes to nucleosome remodeling and transcriptional coactivation by coupling histone modification with recruitment of RNA polymerase II at promoter regions.

The SUPT20H antibody is widely used in epigenetics, gene regulation, and cell biology research to study transcriptional activation, chromatin remodeling, and stress adaptation. Western blot analysis detects a 100 kilodalton band corresponding to SUPT20H, while immunofluorescence reveals both nuclear and cytoplasmic staining, reflecting its multifunctional localization. This antibody enables researchers to investigate how chromatin dynamics and transcriptional machinery coordinate gene expression in response to cellular cues.

Beyond its nuclear role, SUPT20H interacts with the proteasome and heat shock proteins to regulate protein degradation and quality control under stress conditions. It assists in clearing misfolded proteins and maintaining cytoplasmic proteostasis. Dysregulation of SUPT20H expression or mutations affecting its protein-interaction motifs have been linked to altered transcriptional fidelity, stress sensitivity, and oncogenic transformation. The SUPT20H antibody provides a powerful tool for characterizing these processes at the molecular level. NSJ Bioreagents validates this antibody for its applications, ensuring dependable performance in transcriptional and proteostasis research.

Application Notes

Optimal dilution of the SUPT20H antibody should be determined by the researcher.

Immunogen

E.coli-derived human SUPT20H recombinant protein (Position: M1-Q713) was used as the immunogen for the SUPT20H antibody.

Storage

After reconstitution, the SUPT20H antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.