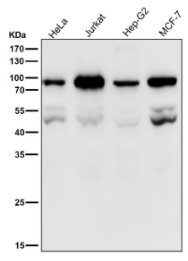
PSIP1 Antibody / PC4 and SFRS1-interacting protein / LEDGF [clone 31P66] (FY12959)

Catalog No.	Formulation	Size
FY12959	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

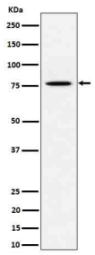
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31P66
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	O75475
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200
Limitations	This PSIP1 antibody is available for research use only.



Western blot testing of human samples using the PSIP1 antibody at 1:1000 dilution for 1 hour at room temperature. A doublet is observed at ~50-55 kDa corresponding to the unmodified p75 and p52 isoforms, with an additional band at ~80â€“90 kDa representing post-translationally modified or complexed PSIP1 forms described in the literature.



Western blot analysis of PSIP1 / LEDGF expression in human HeLa cell lysate using PSIP1 antibody. Although the predicted molecular weight of the p75 isoform is ~55 kDa, it migrates at ~70-75 kDa due to its highly acidic, proline-rich composition and phosphorylation, consistent with published reports for this chromatin-associated protein.

Description

PSIP1 antibody detects Lens epithelium derived growth factor, encoded by the PSIP1 gene. Lens epithelium derived growth factor, also known as LEDGF, is a transcription coactivator that plays important roles in stress response, survival signaling, and gene regulation. It binds chromatin through its PWWP domain and recruits transcriptional machinery to stress inducible genes, helping cells adapt to oxidative and environmental stress. PSIP1 antibody provides a means to study this protein's functions in transcriptional control, survival pathways, and viral integration.

Lens epithelium derived growth factor is best known for its role in HIV infection, where it acts as a tethering factor for integrase, directing viral DNA integration into active chromatin regions. Research using PSIP1 antibody has confirmed that depletion of LEDGF reduces viral replication efficiency, underscoring its importance in retroviral life cycles. Beyond virology, PSIP1 regulates stress response genes, including those activated by heat shock and oxidative stress, contributing to cellular resilience. By detecting this protein with PSIP1 antibody, researchers gain insight into how cells survive hostile environments.

PSIP1 also influences development and cancer. Overexpression of LEDGF has been observed in leukemia and solid tumors, where it enhances survival pathways and confers resistance to apoptosis. Chromosomal translocations involving PSIP1 result in fusion proteins that act as oncogenic drivers, particularly in mixed lineage leukemia. Studies employing PSIP1 antibody have demonstrated altered transcriptional programs and stress resistance in tumor cells, linking LEDGF to oncogenesis and therapeutic resistance. Because of these functions, PSIP1 remains a focus in drug discovery and biomarker research.

PSIP1 antibody is applied in western blotting, chromatin immunoprecipitation, and immunohistochemistry. Western blotting demonstrates isoform expression and stress inducible regulation. Chromatin immunoprecipitation with PSIP1 antibody identifies genomic targets of LEDGF, revealing pathways controlled by this coactivator. Immunohistochemistry highlights tissue distribution, while functional assays demonstrate its ability to modulate transcriptional activity under stress. These diverse applications underscore the importance of PSIP1 antibody in molecular and cellular research.

By supplying validated PSIP1 antibody reagents, NSJ Bioreagents supports investigations into transcriptional regulation, viral biology, and cancer progression. Detection of Lens epithelium derived growth factor provides a reliable tool for understanding how this protein integrates stress response pathways with gene regulation and disease.

Application Notes

Optimal dilution of the PSIP1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PSIP1 / LEDGF was used as the immunogen for the PSIP1 antibody.

Storage

Store the PSIP1 antibody at -20oC.

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