

SUPV3L1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9772A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8IYB8
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24555
Calculated MW	87991
Antigen Region	93-121

Additional Information

Gene ID	6832
Other Names	ATP-dependent RNA helicase SUPV3L1, mitochondrial, Suppressor of var1 3-like protein 1, SUV3-like protein 1, SUPV3L1, SUV3
Target/Specificity	This SUPV3L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 93-121 amino acids from the N-terminal region of human SUPV3L1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SUPV3L1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SUPV3L1
Synonyms	SUV3
Function	Major helicase player in mitochondrial RNA metabolism. Component of the

mitochondrial degradosome (mtEXO) complex, that degrades 3' overhang double-stranded RNA with a 3'-to-5' directionality in an ATP-dependent manner. Involved in the degradation of non-coding mitochondrial transcripts (MT-ncRNA) and tRNA-like molecules (PubMed:[29967381](#)). ATPase and ATP-dependent multisubstrate helicase, able to unwind double-stranded (ds) DNA and RNA, and RNA/DNA heteroduplexes in the 5'-to-3' direction. Plays a role in the RNA surveillance system in mitochondria; regulates the stability of mature mRNAs, the removal of aberrantly formed mRNAs and the rapid degradation of non coding processing intermediates. Also implicated in recombination and chromatin maintenance pathways. May protect cells from apoptosis. Associates with mitochondrial DNA.

Cellular Location

Nucleus. Mitochondrion matrix Mitochondrion matrix, mitochondrion nucleoid

Tissue Location

Broadly expressed..

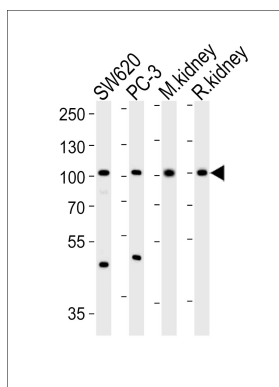
Background

SUV3L1 is an ATPase and DNA/RNA helicase able to unwind DNA/DNA, DNA/RNA and RNA/RNA duplexes in the 5'-3' direction. It may protect cells from apoptosis.

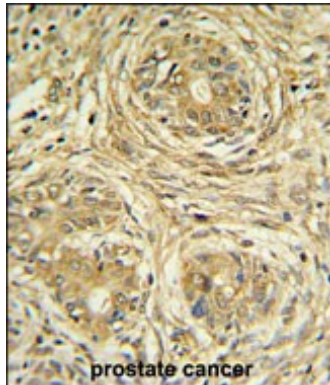
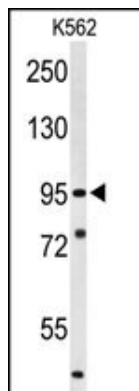
References

Szczesny, R.J., et al. Nucleic Acids Res. 38(1):279-298(2010)
Wang, D.D., et al. J. Biol. Chem. 284(31):20812-20821(2009)
Khidr, L., et al. J. Biol. Chem. 283(40):27064-27073(2008)
Bogenghagen, D.F., et al. J. Biol. Chem. 283(6):3665-3675(2008)
Pereira, M., et al. Mech. Ageing Dev. 128 (11-12), 609-617 (2007)
Shu, Z., et al. Biochemistry 43(16):4781-4790(2004)

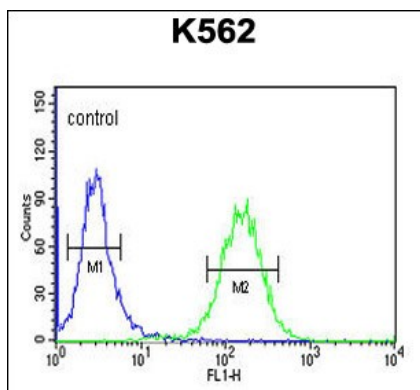
Images



Western blot analysis of SUPV3L1 Antibody (N-term) (Cat. #AP9772a) in K562 cell line lysates (35ug/lane). SUPV3L1 (arrow) was detected using the purified Pab.



SUPV3L1 Antibody (N-term) (Cat. #AP9772a) IHC analysis in formalin fixed and paraffin embedded prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SUPV3L1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SUPV3L1 Antibody (N-term) (Cat. #AP9772a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.