

RECQL5 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19444c

Product Information

Application	WB, E
Primary Accession	O94762
Other Accession	NP_001003715.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39654
Calculated MW	108858
Antigen Region	662-691

Additional Information

Gene ID	9400
Other Names	ATP-dependent DNA helicase Q5, DNA helicase, RecQ-like type 5, RecQ5, RecQ protein-like 5, RECQL5, RECQ5
Target/Specificity	This RECQL5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 662-691 amino acids from the Central region of human RECQL5.
Dilution	WB~~1:1000 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	RECQL5 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RECQL5
Synonyms	RECQ5 {ECO:0000303 PubMed:9878247}
Function	DNA helicase that plays an important role in DNA replication, transcription

and repair (PubMed:[20643585](#), PubMed:[22973052](#), PubMed:[28100692](#)). Probably unwinds DNA in a 3'-5' direction (Probable) (PubMed:[28100692](#)). Binds to the RNA polymerase II subunit POLR2A during transcription elongation and suppresses transcription-associated genomic instability (PubMed:[20231364](#)). Also associates with POLR1A and enforces the stability of ribosomal DNA arrays (PubMed:[27502483](#)). Plays an important role in mitotic chromosome separation after cross-over events and cell cycle progress (PubMed:[22013166](#)). Mechanistically, removes RAD51 filaments protecting stalled replication forks at common fragile sites and stimulates MUS81-EME1 endonuclease leading to mitotic DNA synthesis (PubMed:[28575661](#)). Required for efficient DNA repair, including repair of inter-strand cross-links (PubMed:[23715498](#)). Stimulates DNA decatenation mediated by TOP2A. Prevents sister chromatid exchange and homologous recombination. A core helicase fragment (residues 11-609) binds preferentially to splayed duplex, looped and ssDNA (PubMed:[28100692](#)).

Cellular Location

[Isoform Beta]: Nucleus, nucleoplasm. Nucleus Note=Recruited to sites of DNA damage, such as single-strand breaks and inter-strand cross-links, and at stalled replication forks. Re- localizes from the nucleolus into the nucleus after replicative stress and significantly associates with WRN during S-phase (PubMed:23180761) [Isoform Gamma]: Cytoplasm

Tissue Location

Ubiquitous..

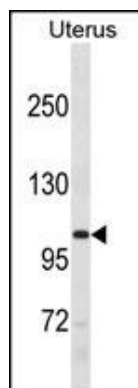
Background

RECQL5 may have an important role in DNA metabolism.

References

- Schwendener, S., et al. J. Biol. Chem. 285(21):15739-15745(2010)
Islam, M.N., et al. Mol. Cell. Biol. 30(10):2460-2472(2010)
Speina, E., et al. Nucleic Acids Res. 38(9):2904-2916(2010)
Aygun, O., et al. J. Biol. Chem. 284(35):23197-23203(2009)
Aygun, O., et al. Proc. Natl. Acad. Sci. U.S.A. 105(25):8580-8584(2008)

Images



RECQL5 Antibody (Center) (Cat. #AP19444c) western blot analysis in human Uterus tissue lysates (35ug/lane). This demonstrates the RECQL5 antibody detected the RECQL5 protein (arrow).

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