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CDC45L Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9881c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O75419
Reactivity	Human
Predicted	Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23958
Calculated MW	65569
Antigen Region	236-263

Additional Information

Gene ID	8318
Other Names	Cell division control protein 45 homolog, PORC-PI-1, CDC45, CDC45L, CDC45L2
Target/Specificity	This CDC45L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-263 amino acids from the Central region of human CDC45L.
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	CDC45L Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC45 (HGNC:1739)
Synonyms	CDC45L, CDC45L2

Function	Required for initiation of chromosomal DNA replication. Core component of CDC45-MCM-GINS (CMG) helicase, the molecular machine that unwinds template DNA during replication, and around which the replisome is built.
Cellular Location	Nucleus. Chromosome. Note=Associates with chromatin
Tissue Location	Widely expressed, highest levels are found in adult testis and thymus and in fetal liver

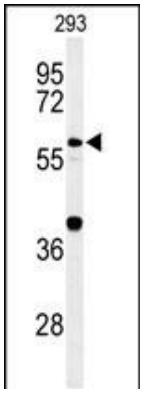
Background

The protein encoded by this gene was identified by its strong similarity with Saccharomyces cerevisiae Cdc45, an essential protein required to the initiation of DNA replication. Cdc45 is a member of the highly conserved multiprotein complex including Cdc6/Cdc18, the minichromosome maintenance proteins (MCMs) and DNA polymerase, which is important for early steps of DNA replication in eukaryotes. This protein has been shown to interact with MCM7 and DNA polymerase alpha. Studies of the similar gene in Xenopus suggested that this protein play a pivotal role in the loading of DNA polymerase alpha onto chromatin. Multiple polyadenlyation sites of this gene are reported.

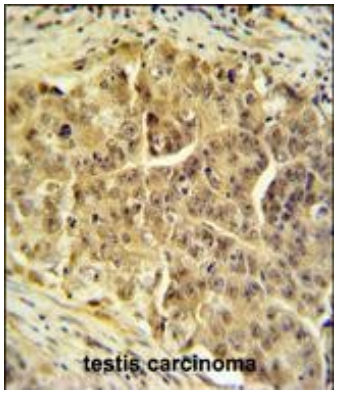
References

Chowdhury, A., et al. Mol. Cell. Biol. 30(6):1495-1507(2010)
Im, J.S., et al. Proc. Natl. Acad. Sci. U.S.A. 106(37):15628-15632(2009)
Ballabeni, A., et al. J. Biol. Chem. 284(5):3028-3036(2009)
Enjuanes, A., et al. Cancer Res. 68(24):10178-10186(2008)
Hoskins, J.M., et al. Clin. Cancer Res. 14(6):1788-1796(2008)

Images

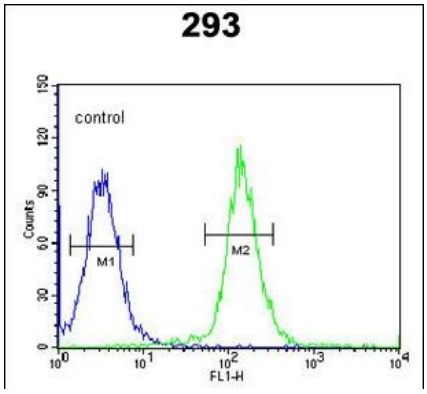


Western blot analysis of CDC45L Antibody (Center) (Cat. #AP9881c) in 293 cell line lysates (35ug/lane). CDC45L (arrow) was detected using the purified Pab.



CDC45L Antibody (Center) (Cat. #AP9881c) IHC analysis in formalin fixed and paraffin embedded testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CDC45L Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

CDC45L Antibody (Center) (Cat. #AP9881c) flow



cytometric analysis of 293 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'.