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LRWD1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11807a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UFC0
Other Accession	NP_690852.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB29538
Calculated MW	70861
Antigen Region	1-30

Additional Information

Gene ID	222229
Other Names	Leucine-rich repeat and WD repeat-containing protein 1, Centromere protein 33, CENP-33, Origin recognition complex-associated protein, ORC-associated protein, ORCA, LRWD1, CENP33, ORCA
Target/Specificity	This LRWD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human LRWD1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	LRWD1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LRWD1
Synonyms	CENP-33 {ECO:0000303|PubMed:20813266}, O

Function	Required for G1/S transition. Recruits and stabilizes the origin recognition complex (ORC) onto chromatin during G1 to establish pre-replication complex (preRC) and to heterochromatic sites in post- replicated cells. Binds a combination of DNA and histone methylation repressive marks on heterochromatin. Binds histone H3 and H4 trimethylation marks H3K9me3, H3K27me3 and H4K20me3 in a cooperative manner with DNA methylation. Required for silencing of major satellite repeats. May be important ORC2, ORC3 and ORC4 stability.
Cellular Location	Nucleus. Chromosome, centromere. Chromosome, telomere. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q8BUI3}. Chromosome, centromere, kinetochore. Note=Localizes to heterochromatin during G1 phase. Restricted to centromeres or telomeres as cells progress though S phase. When cells enter mitosis, relocalizes to centromeres Recruitment to pericentric heterochromatin largely depends on the presence of H3K9me3
Tissue Location	Testis-specific. Drastically down-regulated in testis from patients with Sertoli cell-only syndrome (SCOS)

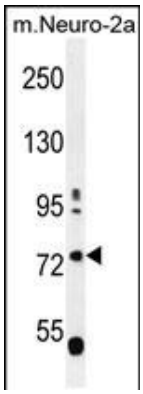
Background

LRWD1, Leucine rich repeats and WD repeat domain containing 1, contains 3 LRR (leucine-rich) repeats and 5 WD repeats.

References

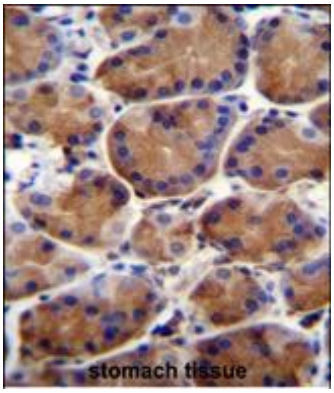
Teng, Y.N., et al. Int. J. Androl. 33(6):832-840(2010)
Shen, Z., et al. Mol. Cell 40(1):99-111(2010)
Vermeulen, M., et al. Cell 142(6):967-980(2010)
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)

Images



LRWD1 Antibody (N-term) (Cat. #AP11807a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane).This demonstrates the LRWD1 antibody detected the LRWD1 protein (arrow).

LRWD1 Antibody (N-term) (Cat. #AP11807a)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of LRWD1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Citations

- LRWD1 expression is regulated through DNA methylation in human testicular embryonal carcinoma cells
- LRWD1 regulates microtubule nucleation and proper cell cycle progression in the human testicular embryonic carcinoma cells.