10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

WDR82 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4812a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q6UXN9
Other Accession	Q8BFQ4, Q6NV31, Q5ZMV7, Q58E77, Q640J6
Reactivity	Human
Predicted	Xenopus, Chicken, Zebrafish, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25812
Calculated MW	35079
Antigen Region	1-30

Additional Information

Gene ID	80335
Other Names	WD repeat-containing protein 82, Protein TMEM113, Swd2, WDR82, TMEM113, WDR82A
Target/Specificity	This WDR82 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human WDR82.
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	WDR82 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	WDR82 {ECO:0000303|PubMed:17998332, ECO:0000312|HGNC:HGNC:28826}

Function	Regulatory component of the SET1/COMPASS complex implicated in the tethering of this complex to transcriptional start sites of active genes (PubMed:17998332, PubMed:18838538, PubMed:20516061). Facilitates histone H3 'Lys-4' methylation (H3K4me) via recruitment of the SETD1A or SETD1B to the 'Ser-5' phosphorylated C-terminal domain (CTD) of RNA polymerase II large subunit (POLR2A) (PubMed:17998332, PubMed:18838538). Component of the PNUTS-PP1 protein phosphatase complex, a protein phosphatase 1 (PP1) complex that promotes RNA polymerase II transcription pause-release, allowing transcription elongation (PubMed:39603240, PubMed:39603239). PNUTS-PP1 also plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase (PubMed:20516061). Together with ZC3H4, but independently of the SET1 complex, part of a transcription termination checkpoint that promotes transcription termination of long non-coding RNAs (lncRNAs) (PubMed:33767452, PubMed:33913806). The transcription termination checkpoint is activated by the inefficiently spliced first exon of lncRNAs and promotes transcription termination of lncRNAs and their subsequent degradation by the exosome (PubMed:33767452).
Cellular Location	Nucleus. Chromosome {ECO:0000250|UniProtKB:Q8BFQ4}. Cytoplasm {ECO:0000250|UniProtKB:Q8BFQ4}. Note=Associates with chromatin (PubMed:20516061). Recruited at sites of high RNA polymerase II occupancy (By similarity). {ECO:0000250|UniProtKB:Q8BFQ4, ECO:0000269|PubMed:20516061}

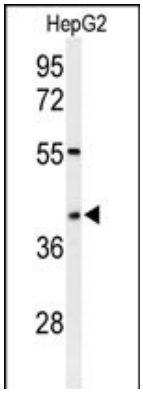
Background

WDR82 is a component of the mammalian SET1A (MIM 611052)/SET1B (MIM 611055) histone H3-Lys4 methyltransferase complexes.

References

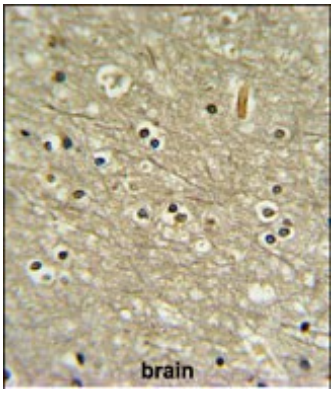
Wu, M., et al. Mol. Cell. Biol. 28(24):7337-7344(2008)
Lee, J.H., et al. Mol. Cell. Biol. 28(2):609-618(2008)
Higa, L.A., et al. Nat. Cell Biol. 8(11):1277-1283(2006)

Images

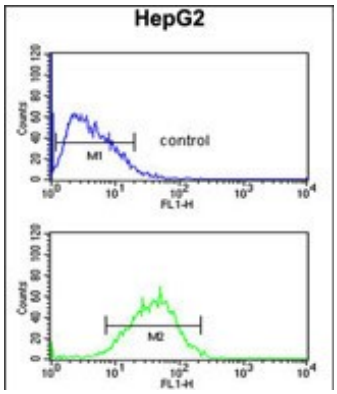


Western blot analysis of WDR82 Antibody (N-term) (Cat. #AP4812a) in HepG2 cell line lysates (35ug/lane). WDR82 (arrow) was detected using the purified Pab.

WDR82 Antibody (N-term) (Cat. #AP4812a) IHC analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the WDR82 Antibody (N-term)



for immunohistochemistry. Clinical relevance has not been evaluated.



WDR82 Antibody (N-term) (Cat. #AP4812a) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.