

WDR82 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4812a

Specification

WDR82 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E <u>O6UXN9</u> <u>O8BFQ4</u>, <u>O6NV31</u>, <u>O5ZMV7</u>, <u>O58E77</u>, <u>O640J6</u> Human Xenopus, Chicken, Zebrafish, Mouse Rabbit Polyclonal Rabbit IgG 35079 1-30

WDR82 Antibody (N-term) - 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 FC~~1:10~50 IHC-P~~1:50~100 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

WDR82 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

WDR82 Antibody (N-term) - 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:<u>17998332</u>, PubMed:<u>18838538</u>, PubMed:<u>20516061</u>). 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:<u>17998332</u>, PubMed:<u>18838538</u>). 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:<u>39603240</u>, PubMed:<u>39603239</u>). PNUTS-PP1 also plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase (PubMed:<u>20516061</u>). Together with ZC3H4, but independently of the SET1 complex, part of a transcription termination checkpoint that promotes transcription termination of long non-coding RNAs (IncRNAs) (PubMed:<u>33767452</u>, PubMed:<u>33913806</u>). The transcription termination checkpoint is activated by the inefficiently spliced first exon of IncRNAs and promotes transcription termination of IncRNAs and their subsequent degradation by the exosome (PubMed:<u>33767452</u>).

Cellular Location

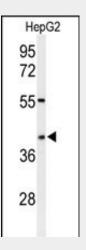
Nucleus. Chromosome {ECO:0000250|UniProtKB:Q8BFQ4}. Cytoplasm {ECO:0000250|UniProtKB:Q8BFQ4}. Note=Associates with chromatin (PubMed:20516061). Recruited at sites of high RNA polymerase II occupancy (By similarity). {ECO:0000250|UniProtKB:Q8BFQ4, ECO:0000269|PubMed:20516061}

WDR82 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

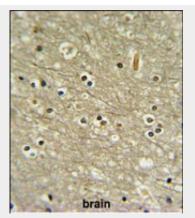
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WDR82 Antibody (N-term) - Images

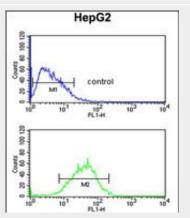


Western blot analysis of WDR82 Antibody (N-term) (Cat. #AP4812a) in HepG2 cell line lysates (35ug/lane). WDR82 (arrow) was detected using the purified Pab.





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.

WDR82 Antibody (N-term) - Background

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

WDR82 Antibody (N-term) - 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) **WDR82 Antibody (N-term) - Citations**

 BOD1L mediates chromatin binding and non-canonical function of H3K4 methyltransferase <u>SETD1A</u>