

### WDR82 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20978b

### Specification

# WDR82 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P-Leica, WB,E <u>O6UXN9</u> <u>O8BFO4</u> Human, Mouse Mouse Rabbit Polyclonal Rabbit IgG 35079 12-46

### 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 a rabbit immunized with a KLH conjugated synthetic peptide between 12~46 amino acids from the N-terminal region of human WDR82.

**Dilution** IHC-P-Leica~~1:500 WB~~1:2000 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**

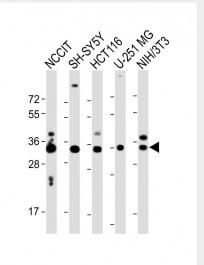
Nucleus. Chromosome {ECO:0000250|UniProtKB:Q8BFQ4}. Cytoplasm {ECO:0000250|UniProtKB:Q8BFQ4}. Note=Associates with chromatin (PubMed:20516061). Recruited at sites of high RNA polymerase II occupancy (By similarity). {ECO:0000250|UniProtKB:Q8BFQ4, ECO:0000269|PubMed:20516061}

# WDR82 Antibody (N-term) - Protocols

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

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

# WDR82 Antibody (N-term) - Images



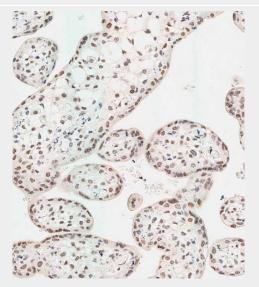
All lanes : Anti-WDR82 Antibody (N-term) at 1:2000 dilution Lane 1: NCCIT whole cell lysate Lane



2: SH-SY5Y whole cell lysate Lane 3: HCT116 whole cell lysate Lane 4: U-251 MG whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human brain tissue using AP20978b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded human placenta tissue using AP20978b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

# WDR82 Antibody (N-term) - Background

Regulatory component of the SET1 complex implicated in the tethering of this complex to transcriptional start sites of active genes. Facilitates histone H3 'Lys-4' methylation via recruitment of the SETD1A or SETD1B to the 'Ser-5' phosphorylated C-terminal domain (CTD) of RNA polymerase II large subunit (POLR2A). Component of PTW/PP1 phosphatase complex, which plays a



role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase.

### WDR82 Antibody (N-term) - References

Clark H.F., et al.Genome Res. 13:2265-2270(2003). Ota T., et al.Nat. Genet. 36:40-45(2004). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Lee J.-H., et al.J. Biol. Chem. 280:41725-41731(2005). Higa L.A., et al.Nat. Cell Biol. 8:1277-1283(2006).

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

• H3K4me3 and Wdr82 are associated with tumor progression and a favorable prognosis in human colorectal cancer.