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

# WDR82 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20977b

## Product Information

| | |
|---|---|
| **Application** | WB, FC, IHC-P, E |
| **Primary Accession** | Q6UXN9 |
| **Reactivity** | Human, Zebrafish, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB51425 |
| **Calculated MW** | 35079 |

## 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 50-85 amino acids from the N-terminal region of human WDR82. |
| **Dilution** | WB~~1:1000 FC~~1:25 IHC-P~~1:250 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}

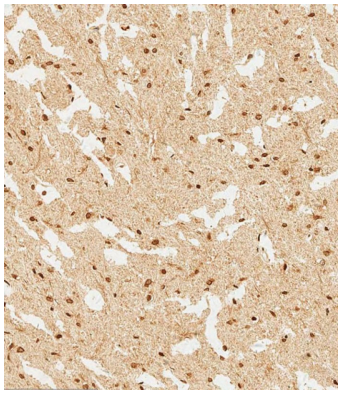
## Background

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.

## References

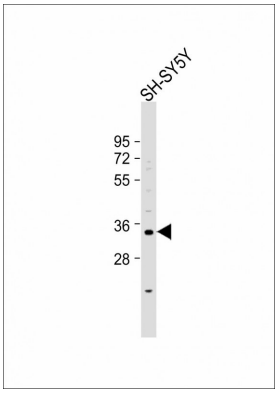
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Lee J.-H.,et al.J. Biol. Chem. 280:41725-41731(2005).
Higa L.A.,et al.Nat. Cell Biol. 8:1277-1283(2006).

## Images



AP20977b staining WDR82 in human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/250) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Anti-WDR82 Antibody (N-term) at 1:2000 dilution + SH-SY5Y whole cell lysate Lysates/proteins at 20 µg 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.