

WDR82 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20977b

Specification

WDR82 Antibody (N-term) - Product Information

Application WB, FC, IHC-P,E

Primary Accession <u>Q6UXN9</u>

Other Accession <u>Q8BFQ4</u>, <u>Q6NV31</u>, <u>Q5ZMV7</u>, <u>Q58E77</u>, <u>Q640I6</u>

Reactivity Human, Mouse, Zebrafish

Predicted Xenopus, Chicken

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 50-85

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 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.

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: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 (IncRNAs) (PubMed:33767452, PubMed:33913806). 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:33767452).

Cellular Location

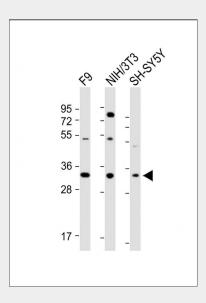
Nucleus. Chromosome {ECO:0000250|UniProtKB:Q8BFQ4}. Cytoplasm {ECO:0000250|UniProtKB:Q8BFQ4}. Note=Associates with chromatin (PubMed:20516061). Recruited at sites of high RNA polymerase II occupancy (By similarity). {ECO:0000250|UniProtKB:Q8BFQ4, ECO:0000269|PubMed:20516061}

WDR82 Antibody (N-term) - Protocols

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

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

WDR82 Antibody (N-term) - Images



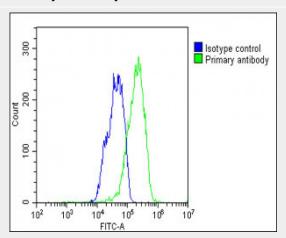
All lanes: Anti-WDR82 Antibody (N-term) at 1:1000 dilution Lane 1: F9 whole cell lysate Lane



2:NIH/3T3 whole cell lysate Lane 3:SH-SY5Y 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.



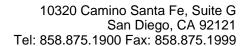
AP20977b staining WDR82 in human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/250) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary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



Overlay histogram showing HepG2 cells stained with AP20977b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP20977b, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 μ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

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).