

WDR5 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1426a

Specification

WDR5 Antibody - Product Information

Application	WB
Primary Accession	P61964
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	36.6kDa KDa

Description

WD-repeat protein 5 (WDR5, also designated BMP-2-induced gene 3 kb or BIG-3) belongs to the family of WD-40 repeat proteins, and is essential for vertebrate development, Hox gene activation and global H3K4 trimethylation. WDR5 is a conserved subunit of Trithorax (TRX) histone methyltransferase complexes that selectively binds to dimethylated Lys4 (K4me2) in Histone H3 to promote K4 trimethylation by TRX. It is expressed in osteoblasts, chondrocytes, osteocytes and marrow stromal cells. The WDR5 protein contains 7 WD-repeats, which may play a role in its function of accelerating osteoblast differentiation.

Immunogen

Purified recombinant fragment of human WDR5 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

WDR5 Antibody - Additional Information

Gene ID 11091

Other Names

WD repeat-containing protein 5, BMP2-induced 3-kb gene protein, WDR5, BIG3

Dilution

WB~~1/500 - 1/2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

WDR5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

WDR5 Antibody - Protein Information

Name WDR5

Synonyms BIG3

Function

Contributes to histone modification (PubMed: [16600877](http://www.uniprot.org/citations/16600877) , PubMed: [16829960](http://www.uniprot.org/citations/16829960) , PubMed: [19103755](http://www.uniprot.org/citations/19103755) , PubMed: [19131338](http://www.uniprot.org/citations/19131338) , PubMed: [19556245](http://www.uniprot.org/citations/19556245) , PubMed: [20018852](http://www.uniprot.org/citations/20018852)). May position the N-terminus of histone H3 for efficient trimethylation at 'Lys-4' (PubMed: [16829960](http://www.uniprot.org/citations/16829960)). As part of the MLL1/MLL complex it is involved in methylation and dimethylation at 'Lys-4' of histone H3 (PubMed: [19556245](http://www.uniprot.org/citations/19556245)). H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation (PubMed: [18840606](http://www.uniprot.org/citations/18840606)). As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues (PubMed: [19103755](http://www.uniprot.org/citations/19103755) , PubMed: [20018852](http://www.uniprot.org/citations/20018852)). May regulate osteoblasts differentiation (By similarity). In association with RBBP5 and ASH2L, stimulates the histone methyltransferase activities of KMT2A, KMT2B, KMT2C, KMT2D, SETD1A and SETD1B (PubMed: [21220120](http://www.uniprot.org/citations/21220120) , PubMed: [22266653](http://www.uniprot.org/citations/22266653)).

Cellular Location

Nucleus

WDR5 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

WDR5 Antibody - Images



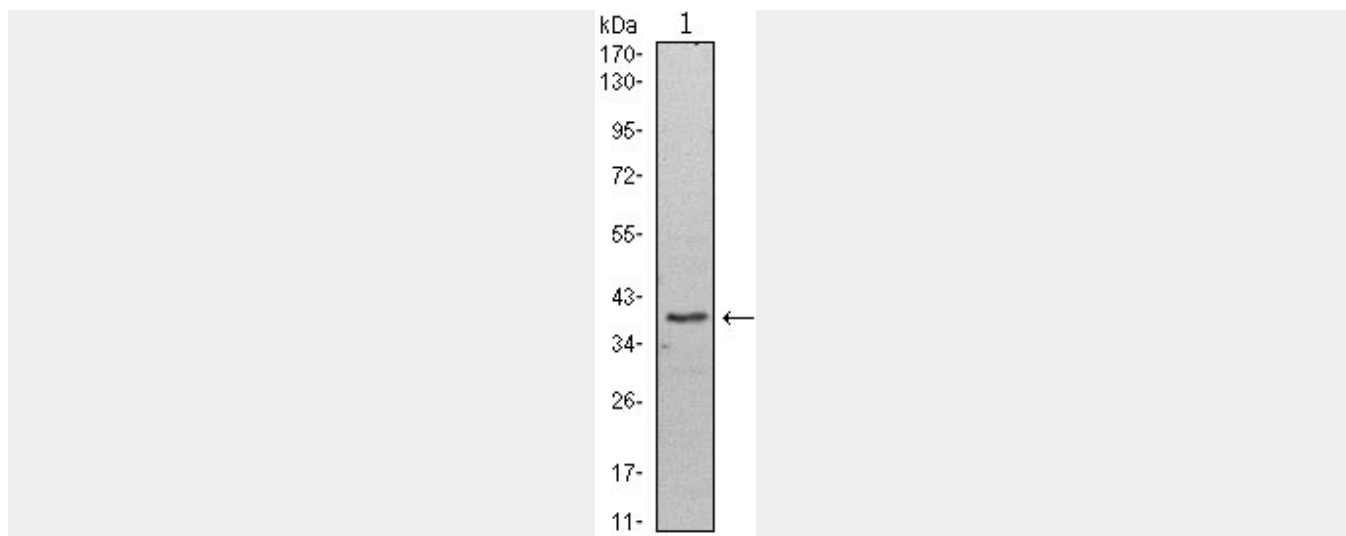


Figure 1: Western blot analysis using WDR5 mouse mAb against Hela (1) cell lysate.

WDR5 Antibody - References

1. Mol Syst Biol. 2007;3:89.
2. J Biol Chem. 2008 Nov 21;283(47):32162-75.