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WDR5 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1426a

Product Information

Application	WB, E
Primary Accession	P61964
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7B11
Isotype	IgG2b
Calculated MW	36588
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.

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 E~~N/A
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.

Protein Information

Name	WDR5
Synonyms	BIG3
Function	Contributes to histone modification (PubMed: 16600877, PubMed:16829960, PubMed:19103755, PubMed:19131338, PubMed:19556245, PubMed:20018852). May position the N-terminus of histone H3 for efficient trimethylation at 'Lys-4' (PubMed:16829960). As part of the MLL1/MLL complex it is involved in methylation and dimethylation at 'Lys-4' of histone H3 (PubMed:19556245). H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation (PubMed:18840606). As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues (PubMed:19103755, PubMed: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, PubMed:22266653).
Cellular Location	Nucleus

References

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

Images

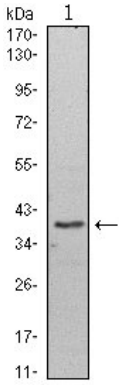


Figure 1: Western blot analysis using WDR5 mouse mAb against Hela (1) cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.