



WHSC1 Mouse mAb

Catalog No	YP-mAb-19527
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	WHSC1 KIAA1090 MMSET NSD2 TRX5
Immunogen	Synthesized peptide derived from human WHSC1. AA range:300-370
Specificity	This antibody detects endogenous levels of WHSC1 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-15°C to -25°C/1 year(Do not lower than -25°C)
Synonyms	WHSC1 KIAA1090 MMSET NSD2 TRX5;Probable histone-lysine N-methyltransferase NSD2 (Multiple myeloma SET domain-containing protein) (Nuclear SET domain-containing protein 2) (Protein trithorax-5) (Wolf-Hirschhorn syndrome candidate 1 protein)
Observed Band	
Calculated Molecular Weight	150kD
Cell Pathway	Nucleus . Chromosome . In embryonic stem (ES) cells , localizes to small foci , probably corresponding to euchromatin (By similarity) . In B-cells , localizes to Ig heavy chain switch region during class switch recombination (By similarity) . . ; [Isoform 1]: Nucleus . Chromosome . ; [Isoform 3]: Nucleus . ; [Isoform 4]: Cytoplasm . Nucleus , nucleolus .
Tissue Specificity	Widely expressed (PubMed:9618163 , PubMed:18172012) . Predominantly expressed in thymus and testis (PubMed:9787135 , PubMed:18172012) .
Function	Histone methyltransferase which specifically dimethylates nucleosomal histone H3 at 'Lys-36' (H3K36me2) . Also monomethylates nucleosomal histone H3 at 'Lys-36' (H3K36me) in vitro . Does not trimethylate nucleosomal histone H3 at 'Lys-36' (H3K36me3) . However , specifically trimethylates histone H3 at 'Lys-36' (H3K36me3) at euchromatic regions in embryonic stem (ES) cells (By similarity) . By methylating histone H3 at 'Lys-36' , involved in the regulation of gene transcription during various biological processes . In ES cells , associates with developmental transcription factors such as SALL1 and represses inappropriate



gene transcription mediated by histone deacetylation (By similarity) . During heart development , associates with transcription factor NKX2-5 to repress transcription of NKX2-5 target genes (By similarity) . Plays an essential role in adipogenesis , by regulating expression of genes involved in pre-adipocyte differentiation . During T-cell receptor (TCR) and CD28-mediated T-cell activation , promotes the transcription of transcription factor BCL6 which is required for follicular helper T (Tfh) cell differentiation (By similarity) . During B-cell development , required for the generation of the B1 lineage (By similarity) . During B2 cell activation , may contribute to the control of isotype class switch recombination (CRS) , splenic germinal center formation , and the humoral immune response (By similarity) . Plays a role in class switch recombination of the immunoglobulin heavy chain (IgH) locus during B-cell activation (By similarity) . By regulating the methylation of histone H3 at 'Lys-36' and histone H4 at 'Lys-20' at the IgH locus , involved in TP53BP1 recruitment to the IgH switch region and promotes the transcription of IgA (By similarity) . ; [Isoform 1]: Histone methyltransferase which specifically dimethylates nucleosomal histone H3 at 'Lys-36' (H3K36me2) . ; [Isoform 4]: Histone methyltransferase which specifically dimethylates nucleosomal histone H3 at 'Lys-36' (H3K36me2) . Methylation of histone H3 at 'Lys-27' is controversial . Mono- , di- or tri-methylates histone H3 at 'Lys-27' (H3K27me , H3K27me2 and H3K27me3) . Does not methylate histone H3 at 'Lys-27' . May act as a transcription regulator that binds DNA and suppresses IL5 transcription through HDAC recruitment .

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images