



Rabbit Anti-phospho-KMT6 (Ser21) antibody

SL10495R

Product Name:	phospho-KMT6 (Ser21)
Chinese Name:	磷酸化抑癌蛋白EZH2抗体
Alias:	KMT6 / EZH2 (phospho S21); KMT6 / EZH2 (phospho S21); KMT6/EZH2 (phospho Ser21); p-KMT6/EZH2 (Ser21); p-KMT6/EZH2 (S21); Enhancer of zeste homolog 2; Enx1h; MGC9169; Enhancer of zeste 2; ENX-1; ENX 1; ENX1; EZH1; EZH2; EZH 2; EZH2_HUMAN; Histone-lysine N-methyltransferase EZH2; KMT6A; Lysine N-methyltransferase 6; Enhancer of zeste homolog 2 (Drosophila); Enhancer of zeste, Drosophila, homolog 2; KMT 6; KMT6; KMT6A; WVS2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,Guinea Pig,Xenopus laevis, Zebrafish,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	82kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human KMT6/EZH2 around the phosphorylation site of Ser21:VK(p-S)EY
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

This gene encodes a member of the Polycomb-group (PcG) family. PcG family members form multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes over successive cell generations. This protein associates with the embryonic ectoderm development protein, the VAV1 oncoprotein, and the X-linked nuclear protein. This protein may play a role in the hematopoietic and central nervous systems. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Feb 2011].

Function:

Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) of histone H3, leading to transcriptional repression of the affected target gene. Able to mono-, di- and trimethylate 'Lys-27' of histone H3 to form H3K27me1, H3K27me2 and H3K27me3, respectively. Compared to EZH2-containing complexes, it is more abundant in embryonic stem cells and plays a major role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1, CDKN2A and retinoic acid target genes. EZH2 can also methylate non-histone proteins such as the transcription factor GATA4.

Subunit:

Binds ATRX via the SET domain (Probable). Component of the PRC2/EED-EZH2 complex, which includes EED, EZH2, SUZ12, RBBP4 and RBBP7 and possibly AEBP2. The minimum components required for methyltransferase activity of the PRC2/EED-EZH2 complex are EED, EZH2 and SUZ12. The PRC2 complex may also interact with DNMT1, DNMT3A, DNMT3B and PHF1 via the EZH2 subunit and with SIRT1 via the SUZ12 subunit. Interacts with HDAC1 and HDAC2. Interacts with PRAME.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in many tissues. Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis.

Post-translational modifications:

Phosphorylated by AKT1. Phosphorylation by AKT1 reduces methyltransferase activity. Phosphorylation at Thr-345 by CDK1 and CDK2 promotes maintenance of H3K27me3 levels at EZH2-target loci, thus leading to epigenetic gene silencing. Sumoylated.

Similarity:

Belongs to the histone-lysine methyltransferase family. EZ subfamily.

Product Detail:

Contains 1 CXC domain.
Contains 1 SET domain.

SWISS:
Q15910

Gene ID:
2146

Database links:

[Entrez Gene: 2146](#) Human

[Entrez Gene: 14056](#) Mouse

[Entrez Gene: 100381148](#) Xenopus laevis

[Entrez Gene: 399174](#) Xenopus laevis

[Entrez Gene: 768133](#) Zebrafish

[Omim: 601573](#) Human

[SwissProt: Q15910](#) Human

[SwissProt: Q61188](#) Mouse

[SwissProt: Q4V863](#) Xenopus laevis

[SwissProt: Q98SM3](#) Xenopus laevis

[SwissProt: Q08BS4](#) Zebrafish

[Unigene: 444082](#) Human

[Unigene: 246688](#) Mouse

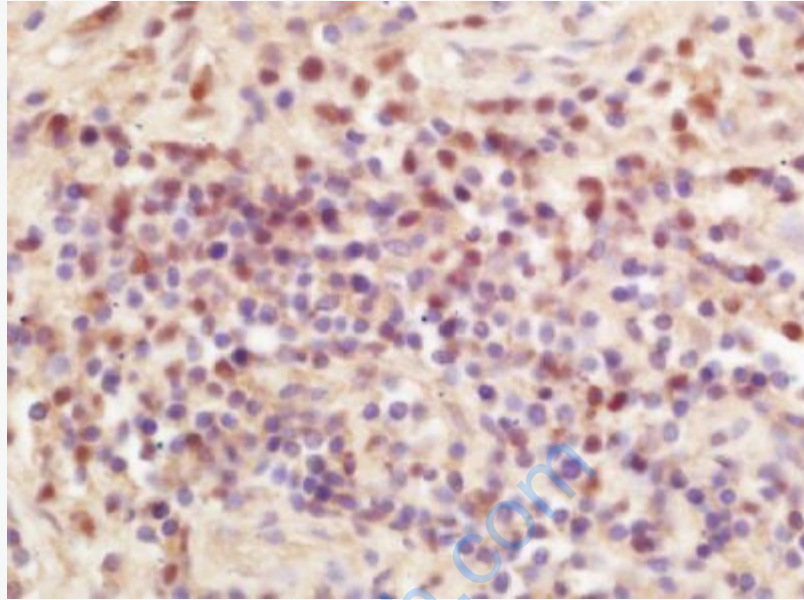
[Unigene: 19136](#) Xenopus laevis

[Unigene: 47646](#) Xenopus laevis

[Unigene: 76424](#) Zebrafish

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human colon cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (p-EZH) Polyclonal Antibody, Unconjugated (SL10495R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.