

Store at
-20C
#12408**Ezh2 (D2C9) XP[®] Rabbit
mAb (Biotinylated)**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	98	Rabbit IgG	#Q15910	2146

**Product Usage
Information****Application**

Western Blotting

Dilution

1:1000

StorageSupplied in 140 mM NaCl, 3 mM KCl, 10 mM sodium phosphate (pH 7.4) dibasic, 2 mM potassium phosphate monobasic, 2 mg/mL BSA, and 50% glycerol. Store at -20°C. *Do not aliquot the antibody.***Specificity/Sensitivity**Ezh2 (D2C9) XP[®] Rabbit mAb (Biotinylated) recognizes endogenous levels of total Ezh2 protein.**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg354 of human Ezh2 protein.

DescriptionThis Cell Signaling Technology antibody is conjugated to biotin under optimal conditions. The biotinylated antibody is expected to exhibit the same species cross-reactivity as the unconjugated Ezh2 (D2C9) XP[®] Rabbit mAb #5246.**Background**

The polycomb group (PcG) proteins are involved in maintaining the silenced state of several developmentally regulated genes and contribute to the maintenance of cell identity, cell cycle regulation, and oncogenesis (1,2). Enhancer of zeste homolog 2 (Ezh2), a member of this large protein family, contains four conserved regions including domain I, domain II, and a cysteine-rich amino acid stretch that precedes the carboxy-terminal SET domain (3). The SET domain has been linked with histone methyltransferase (HMTase) activity. Moreover, mammalian Ezh2 is a member of a histone deacetylase complex that functions in gene silencing, acting at the level of chromatin structure (4). Ezh2 complexes methylate histone H3 at Lys9 and 27 *in vitro*, which is thought to be involved in targeting transcriptional regulators to specific loci (5). Ezh2 is deregulated in various tumor types, and its role, both as a primary effector and as a mediator of tumorigenesis, has become a subject of increased interest (6).

Background References

1. Sellers, W.R. and Loda, M. (2002) *Cancer Cell* 2, 349-50.
2. Visser, H.P. et al. (2001) *Br J Haematol* 112, 950-8.
3. Chen, H. et al. (1996) *Genomics* 38, 30-7.
4. Tonini, T. et al. (2004) *Oncogene* 23, 4930-7.
5. Müller, J. et al. (2002) *Cell* 111, 197-208.
6. Kleer, C.G. et al. (2003) *Proc Natl Acad Sci U S A* 100, 11606-11.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key**W:** Western Blotting**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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