

| PRODUCT NAME | | |
|--------------------------------|------------------------------------|--------------------------|
| EZH2 polyclonal antibody | | |
| Other names: ENX-1, KMT6, EZH1 | | |
| Cat. No. pAb-039-050 | Type: Polyclonal ChIP grade | Size: 50 µg /50 µl |
| Lot #: 002 | Source: Rabbit | Concentration: 1.0 µg/µl |

Description: Polyclonal antibody raised in rabbit against the N-terminus (aa1-343) of the mouse EZH2 protein (Enhancer of zeste homolog 2).

Specificity: Human and mouse: positive
Other species: not tested

| Applications | Suggested dilution | References |
|---------------------|--------------------|------------|
| Western blotting | 1:2,000 | Fig 1 |
| Immunocytochemistry | 1:100 - 1:500 | Ref 1 |
| ChIP | 2 - 5 µg/ChIP | Fig 2 |

* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5 µg per IP.

Purity: Protein G purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

This antibody has been described in:

(1) Kuzmichev A, Margueron R, Vaquero A, Preissner TS, Scher M, Kirmizis A, Ouyang X, Brockdorff N, Abate-Shen C, Farnham P and Reinberg D (2005) Composition and histone substrates of polycomb repressive group complexes change during cellular differentiation. PNAS 102:1859-1864.

Last data sheet update: February 3, 2011

Product description

EZH2 (UniProt/Swiss-Prot entry Q15910) is a histone-lysine methyltransferase which methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression. It is a member of the polycomb group (PcG) family which form multimeric protein complexes and are involved in maintaining the transcriptional repressive state of genes over successive cell generations. The EZH2 activity is dependent on the association with other components of the PRC2 complex (EED, EZH2, SUZ12/JJAZ1, RBBP4 and RBBP7). EZH2 may play a role in the hematopoietic and central nervous systems. Over-expression of EZH2 is observed during advanced stages of prostate cancer and breast cancer.

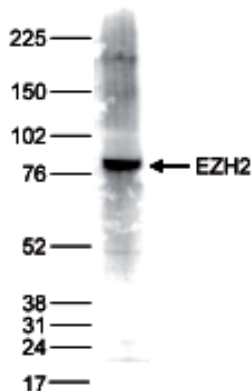


Figure 1

Western blot analysis using the Diagenode antibody directed against EZH2

Nuclear extracts of HeLa cells (40 µg) were analysed by Western blot using the Diagenode antibody against EZH2 (cat. No. pAb-039-050) diluted 1:2,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.

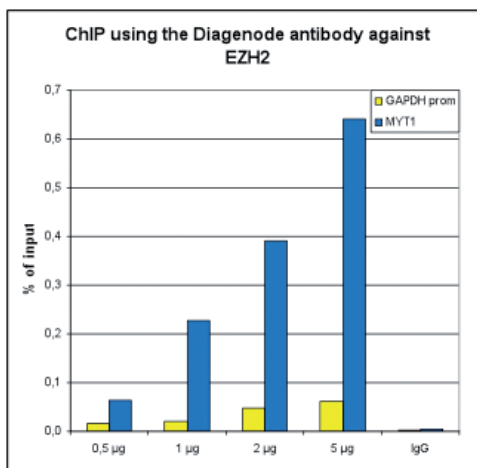


Figure 2

ChIP results obtained with the Diagenode antibody directed against EZH2

ChIP assays were performed using HeLa cells, the Diagenode antibody against EZH2 (cat. No. pAb-039-050) and optimized PCR primer sets for qPCR. ChIP was performed with the "Auto Histone ChIP-seq" kit (cat. No. AB-Auto02-A100), using sheared chromatin from 2 million cells. A titration of the antibody consisting of 0.5, 1, 2 and 5 µg per ChIP experiment was analysed. IgG (2 µg/IP) was used as negative IP control. Quantitative PCR was performed with primers for the promoter of the active GAPDH gene, and for MYT1, a known EZH2 target gene. Figure 4 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).