

# Polycomb Group 2 (PRC2) Antibody Sampler Kit



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## 1 Kit (6 x 20 microliters)

#### For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Ezh2 (D2C9) Rabbit Monoclonal Antibody	5246	20 μΙ	98 kDa	Rabbit IgG
EZH1 (D7D5D) Rabbit Monoclonal Antibody	42088	20 μΙ	95 kDa	Rabbit IgG
SUZ12 (D39F6) Rabbit Monoclonal Antibody	3737	20 μΙ	83 kDa	Rabbit IgG
EED Antibody	51673	20 μΙ	50-70 kDa	Rabbit
JARID2 (D6M9X) Rabbit Monoclonal Antibody	13594	20 μΙ	150 kDa	Rabbit IgG
AEBP2 (D7C6X) Rabbit Monoclonal Antibody	14129	20 μΙ	70, 28 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Polycomb Group 2 (PRC2) Antibody Sampler Kit provides an economical means of evaluating total levels of Polycomb Group 2 Proteins. The kit contains enough primary and secondary antibodies to perform two western blot experiments.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Background** 

The polycomb group (PcG) proteins are involved in maintaining the silenced state of multiple developmentally regulated genes and contribute to the maintenance of cell identity, cell cycle regulation, and oncogenesis (1-4). Enhancer of zest homolog 1 (Ezh1) and enhancer of zest homolog 2 (Ezh2) are members of this large protein family and are subunits of the polycomb repressor complex 2 (PRC2), also known to contain SUZ12, EED, JARID2, and AEBP2. Ezh1 and its paralog Ezh2 are mutually exclusive catalytic subunits of the PRC2 complex, which functions to mono-, di-, and tri-methylate Lys27 on histone H3, all marks that are associated with transcriptional repression. SUZ12 and EED proteins are also absolutely required for methyltransferase activity (5). JARID2 and AEBP2 are both accessory proteins that function to recruit the PRC2 complex to target genes and enhance methyltransferase activity by binding to DNA and histone proteins in nucleosomes (5-13).

#### **Background References**

- 1. Boyer, L.A. et al. (2006) Nature 441, 349-53.
- 2. Cao, R. et al. (2002) Science 298, 1039-43.
- 3. Müller, J. et al. (2002) Cell 111, 197-208.
- 4. Lee, T.I. et al. (2006) Cell 125, 301-13.
- 5. Cao, R. and Zhang, Y. (2004) Mol Cell 15, 57-67.
- 6. Peng, J.C. et al. (2009) Cell 139, 1290-302.
- 7. Shen, X. et al. (2009) Cell 139, 1303-14.
- 8. Pasini, D. et al. (2010) Nature 464, 306-10.
- 9. Li, G. et al. (2010) Genes Dev 24, 368-80.
- 10. Son, J. et al. (2013) Genes Dev 27, 2663-77.
- 11. Kaneko, S. et al. (2014) Mol Cell 53, 290-300.
- 12. Kim, H. et al. (2009) Nucleic Acids Res 37, 2940-50.
- 13. Kalb, R. et al. (2014) Nat Struct Mol Biol 21, 569-71.

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