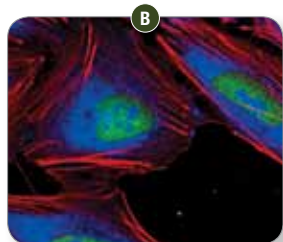
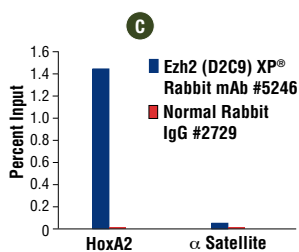
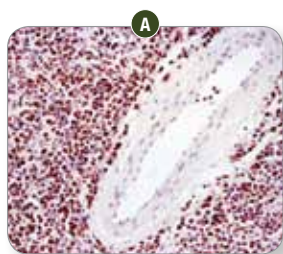


Unparalleled product quality, validation, and technical support

The highest quality antibodies for the study of

# Epigenetics from Cell Signaling Technology



**Ezh2 (D2C9) XP<sup>®</sup> Rabbit mAb #5246:**  
 IHC analysis of paraffin-embedded human lymphoma (A) using #5246. Confocal IF analysis of HeLa cells (B) using #5246 (green) and S6 Ribosomal Protein (54D2) Mouse mAb #2317 (blue). Actin filaments were labeled with DY-554 phalloidin (red). Chromatin immunoprecipitations (C) were performed with cross-linked chromatin from  $4 \times 10^6$  NCCIT cells and either 5  $\mu$ l of #5246 or 2  $\mu$ l of Normal Rabbit IgG #2729 using **SimpleChIP<sup>®</sup> Enzymatic Chromatin IP Kit (Magnetic Beads) #9003**. The enriched DNA was quantified by real-time PCR.

- Innovative products from Cell Signaling Technology offer unsurpassed sensitivity, specificity, reproducibility, and performance.
- Extensive in-house validation means optimization is not left up to you.
- Technical support provided by the same scientists who produce and validate the products translates into a thorough, fast, and accurate response.

**TOP IMAGE:** Heterochromatin is characterized by a repressive, tight packaging of nucleosomes, which impedes transcription factors from gaining access to regulatory sites on the DNA. Methylation of cytosine bases in regions called CpG islands, found in many gene promoters, leads to formation of transcriptionally repressed heterochromatin. Methylation of cytosine bases by DNA methyltransferases (DNMTs) facilitates recruitment of Methyl-CpG-binding Protein 2 (MeCP2), which brings along other associated proteins, including histone deacetylases (HDACs), histone methyltransferases (HMTs), and Heterochromatin Protein 1 (HP1). These proteins then facilitate the deacetylation and methylation of histone proteins, resulting in the formation and maintenance of the repressive state of heterochromatin. To view our epigenetics digital animation movie and for more information, please visit [www.cellsignal.com](http://www.cellsignal.com).

for quality products you can trust...

[www.cellsignal.com](http://www.cellsignal.com)



**Cell Signaling**  
 TECHNOLOGY<sup>®</sup>