## Blood and tissue DNA methylation kit

Complete bisulfite conversion from blood and tissue samples

The Blood and tissue DNA methylation kit features simple and reliable DNA bisulfite conversion directly from blood, tissue, and cells without the prerequisite for DNA purification. The sensitivity of this kit makes it possible to amplify bisulfite converted DNA from as few as 10 cells or 50pg DNA. Desulphonation and clean-up of the converted DNA is performed using a unique low-elution spin column. High yield, converted DNA is ideal for PCR, array, bisulfite and next generation sequencing, etc.

Cytosine methylation is a naturally occurring base modification, in both prokaryotic and eukaryotic organisms. It involves the addition of a methyl group to the fifth carbon position of the cytosine pyrimidine ring via a methyltransferase enzyme. It has been demonstrated that aberrant DNA methylation is a widespread phenomenon in cancer and may be among the earliest changes to occur during oncogenesis. DNA methylation has also been shown to play a central role in gene imprinting, embryonic development, X-chromosome gene silencing, and cell cycle regulation.

**Ordering Information** 

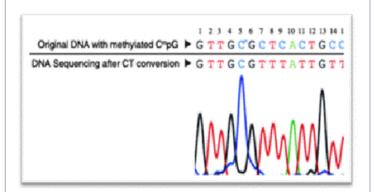
Order Online »

ENZ-45004-0050	50 tests	
ENZ-45004-0200	200 tests	

Manuals, SDS & CofA

**View Online** »

- Complete bisulfite conversion of DNA from blood and tissue
- Compatible with small sample inputs – as few as 10 cells or 50 pg DNA
- Suited for FFPE and LCM-derived samples with easy to follow instructions.



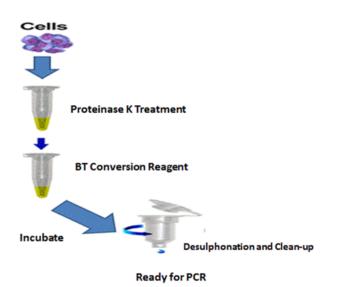


Figure: Overview of the bisulfite conversion principle. DNA template following bisulfite treatment is sequenced. Results show that methylated cytosines (position 5) remain intact while unmethylated cytosines (positions 7,11,14,15) are converted to uracil following bisufite treatment.

Figure: Outline of the Blood and tissue methylation kit procedures. This includes treating the cells with Proteinase followed by the BT conversion incubation step.

## **Handling & Storage**

**Use/Stability** With proper storage, good for one year upon receipt.

**Handling** Avoid exposure to light. Reconstituted Proteinase K should be stored at -20°C.

Long Term Storage Ambient

**Shipping** Ambient Temperature

## Regulatory Status RUO - Research Use Only

## **Product Details**

**Contents** Proteinase K and storage buffer, Methylation digestion buffer (2x), BT conversion

reagent, Methylation dilution buffer, Methylation-solubilization buffer, Methylation reaction buffer, Methylation binding buffer, Methylation wash buffer concentrate, M-desulphonation buffer, Methylation elution buffer, IC columns, Collection tubes