abcam

Product datasheet

Fast Bisulfite Conversion Kit ab117127

2 References 2 Images

Overview

Product name Fast Bisulfite Conversion Kit

Assay time 0h 30m

Product overview Fast DNA modification Kit (ab117127) allows DNA denaturation and bisulfite conversion to be processed at the same time so the complete procedure can be performed in only **30 minutes**. Furthermore, it prevents more than 90% of DNA loss, completely converting unmethylated cytosine into uracil.

Traditional methods involve a separate denaturation step followed by a subsequent sodium bisulfite DNA conversion step - but with ab117127, DNA denaturation status is concurrently sustained throughout the entire bisulfite DNA conversion process. ab117127 is suitable for MS-PCR, real time MS-PCR, bisulfite sequencing, pyrosequencing and methylation microarray.

DNA methylation is a covalent modification of the cytosine ring at the 5' position of a CpG dinucleotide which leads to epigenetic inactivation of genes when found in 5'-CpG-3'dinucleotides within promoters or in the first exon of genes. It is well demonstrated that DNA methylation plays an important role in the regulation of gene expression, tumorigenesis, and other genetic and epigenetic diseases.

Most methods for DNA methylation detection require a prior bisulfite-based DNA modification. *Bisulfite-based DNA modification* is used to discrimate between cytosine and methylated cytosine, in which DNA is treated with bisulfite salt to convert cytosine residues to uracil in a single-stranded DNA, while methylated cytosine remains the same.

Not sure if this is the right kit for you? Check out our **bisulfite modification guide** for more information.

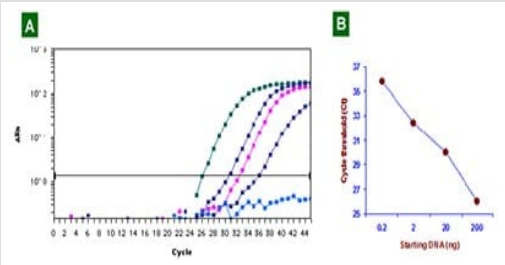
Properties

Storage instructions Store at room temperature. Please refer to protocols.

Components	50 tests
Capture Solution	1 x 15ml

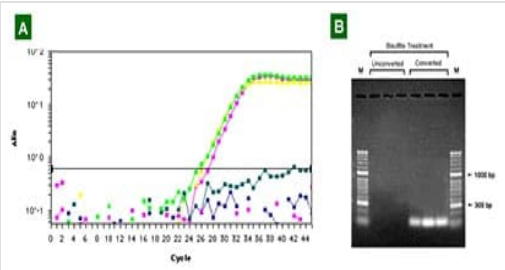
Components	50 tests
Conversion Enhancer	5 vials
Conversion Mix Solution	1 x 6ml
Denaturation Enhancer	1 x 600µl
Desulphonation Solution	1 x 60µl
Elution Solution	1 x 1ml
F-Collection Tube	1 pack
F-Spin Column	1 pack

Images



Functional Studies - DNA modification Kit (ab117127)

Effective DNA Protection: Fully methylated human genomic DNA at various amounts (0.2 ng-200 ng) were converted using the ab117127. 1 µl of 20 µl eluate was used for real time qPCR and a pair of primers was used to amplify converted DNA. As little as 0.2 ng DNA is sufficient for bisulfite conversion using the ab117127. A: real time PCR; B: starting DNA amount-CT value curve.



Functional Studies - DNA modification Kit (ab117127)

Complete Cytosine Conversion: 200 ng of genomic DNA isolated from 3 cancer cell lines was treated with ab117127. Next, the unconverted and converted DNA in each treated sample were determined using unconverted DNA-specific and converted DNA-specific primers (ß-actin, 110 bps), respectively. A: real time PCR; B: end-point PCR. The ab117127 treated DNA was completely converted, and no unconverted DNA in the treated samples was determined after 45 cycles.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors