

Certificate of Analysis

Product Name: DNA Methylation Detection Kit

Catalog Number: K5082100

Shipping Condition: Room temperature

Description

Recent studies indicate that DNA methylation of a cytosine located 5' to guanosine has important regulatory effects on gene expression, especially when CpG-rich areas located in the promoter regions of many genes (1) are methylated. And more studies have shown that aberrant methylation of CpG-rich areas in the promoter regions is associated with development of human cancer. (2, 3)

Methylation-specific PCR (MSP) is a recently developed technique for determination of methylation patterns from very small amount of DNA samples (4). Sodium bisulfite treatment is the critical step involved in this technique. BioChain's Genomic DNA Methylation Detection Kit is developed and optimized for sodium bisulfite treatment.

Quality Control

A representative kit from the same lot is randomly selected for treatment of methylated genomic DNA and unmethylated genomic DNA. After treatment, methylation detection primer set only amplify originally methylated DNA template and unmethylation detection primer set only amplify originally unmethylated DNA template.

Kit Components

1. ___ Methylated Genomic DNA Detection kit
2. Certificate of Analysis
3. User's manual
4. MSDS

Reference:

1. Wajed, S. A., Laird, P. W., and DeMeester, T. R. DNA methylation: an alternative pathway to cancer. *Ann. Surg.*, 234: 10–20, 2001.
2. SABINE ZOCHBAUER-MÜLLER,^a JOHN D. MINNA,^b ADI F. GAZDAR^b; *The Oncologist* 2002;7:451-457
3. Mary Jo Fackler, Megan McVeigh, Jyoti Mehrotra, Marissa A. Blum, Julie Lange, Amanda Lapidés, Elizabeth Garrett, Pedram Argani, and Saraswati Sukumar¹; *CANCER RESEARCH* 64, 4442–4452, July 1, 2004
4. JAMES G. HERMAN^{*†}, JEREMY R. GRAFF^{*}, SANNA MYOHANEN^{*}, BARRY D. NELKIN^{*}, AND STEPHEN B. BAYLIN^{*} *Proc. Natl. Acad. Sci. USA* Vol. 93, pp. 9821-9826, September 1996

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APPROVED BY: _____

