

# Fully Methylated Jurkat DNA

**Catalog No:** 55003

## Quality Control:

Contents:

Fully Methylated Jurkat DNA 200  $\mu$ l (50 ng/ $\mu$ l)

BRCA1 forward and reverse primer mix 400  $\mu$ l (2.5 pmol/ $\mu$ l each primer)

Fully Methylated Jurkat DNA is provided undigested. To use Fully Methylated Jurkat DNA as a control in the MethylCollector™ Kit (Cat. No. 55002), it must first be digested with a restriction enzyme of choice like *Mse* I, *Bfa* I, *Tas* I or *Csp6* I. Also, the Fully Methylated Jurkat DNA must be used with the BRCA1 primers for use as a control in the MethylCollector Kit.

Fully Methylated Jurkat DNA is quality control tested with the MethylCollector Kit. Reactions were performed as described in the MethylCollector manual. Briefly, Fully Methylated Jurkat DNA was tested in parallel with Jurkat Genomic DNA in a MethylCollector assay with and without the MBD2b capture protein. The eluted DNA was subsequently analyzed by PCR with BRCA1 primers that flank a locus in the BRCA1 gene known to contain 18 CpG sites.

5  $\mu$ l DNA resulting from the MethylCollector assay was subjected to 36 rounds of PCR with the BRCA1 primers. No product was observed from samples assayed without MBD2b capture protein (lanes 2 and 3). No PCR product resulted from Jurkat Genomic DNA assayed with 1  $\mu$ g MBD2b (lane 4), however, PCR product resulted from Fully Methylated DNA assayed with 1  $\mu$ g MBD2b demonstrating successful capture of methylated DNA (lane 5). Input DNA resulted in bands of equal intensity, indicating that the same amount of each control DNAs had been used in the MethylCollector assay (lanes 6 and 7).

PCR Reaction Conditions: BRCA1 primers result in a 166 bp product

5  $\mu$ l DNA sample  
 9.8  $\mu$ l PCR Grade Water  
 2.5  $\mu$ l 10X PCR Buffer  
 2.5  $\mu$ l 10X PCR Loading Dye  
 1  $\mu$ l 5 mM dNTP Mix  
 4  $\mu$ l BRCA1 Primer Mix  
 0.2  $\mu$ l Taq 5 U/ $\mu$ l

Cycle Conditions:

94°C 3 minutes followed by 36 rounds of: 94°C 20 seconds, 55°C 30 seconds, 72°C 30 seconds

## Storage:

Store at -20°C. This product is guaranteed stable for 6 months from date of receipt when stored properly.

