

Methylated DNA Standard Kit

Catalog No.: 55008

Format: 3 x 2.5 µg each DNA standard;
3 x 400 µl (2.5 µM) APC PCR primer mix

Storage: Store at -20°C. Guaranteed stable for 6 months when stored properly.

Methylated DNA Standards are for *in vitro* research use only and are not intended for use in humans or animals.

The 338 base pair sequence of the APC (adenomatous polyposis coli) gene used to generate the dsDNA standards is shown below:

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1                                                                                               64
GAGGAAGGTGAAGCACTCAGTTGCCTTCTCGGGCCTCGGCGCCCCCTATGTACGCCTCCCTGGG
CTCCTTCCACTTCGTGAGTCAACGGAAGAGCCCGGAGCCGCGGGGGATACATGCGGAGGGACCC
65                                                                                               128
CTCGGGTCCGGTTCGCCCTTTGCCCGCTTCTGTACCACCCTCAGTTCTCGGGTCTTGAGCACC
GAGCCAGGCCAGCGGGAAACGGGCGAAGACATGGTGGGAGTCAAGAGCCCAGGACCTCGTGG
129                                                                                               192
GGCGGCAGCAGGAGCTGCGTCCGGCAGGAGACGAAGAGCCCGGGCGGCGCTCGTACTTCTGGCC
CCGCCGTCGTCCCTCGACGCAGGCCGTCTCTGCTTCTCGGGCCCGCCGCGAGCATGAAGACCGG
193                                                                                               256
ACTGGGCGAGCGTCTGGCAGGTGAGTGAGGCTGCAGGCATTGACGTCTCCTCCCGGCAAAGCTT
TGACCCGCTCGCAGACCGTCCACTCACTCCGACGTCCGTAAGTGCAGAGGAGGGCCGTTTCGAA
257                                                                                               320
CCTCGGCTTTGCCCGCCGCTGCTCGGGACCCTACGGTGTCTCGGCCCGACTCTGTGGCTCTCTT
GGAGCCGAAACGGGGCGGCGACGAGCCCTGGGATGCCACGAGCCGGGCTGAGACACCGAGAGAA
321                                                                                               338
CTCTCCATGTCTCACCCCT
GAGAGGTACAGAGTGGGA
  
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Each methylated DNA standard contains 122 cytosine residues on the forward strand, with 29 cytosine residues occurring in a CpG sequence context

Each standard was generated using PCR amplification with either unmethylated dCTP, 5-methyl dCTP or 5-hydroxymethyl dCTP in the PCR reaction to ensure that all cytosine residues contain the same methylation state.

The primer sequences included in the APC PCR primer mix are shown as bold and underlined. The forward and reverse strand primers are provided together as the APC PCR primer mix. These primers generate a 195 bp PCR product.

APC Forward: 5'- **GGAAGGTGAAGCACTCAGTTG** – 3'

APC Reverse: 5'- **CCAGTGGCCAGAAGTACGAG** – 3'