

CpG MethylQuest™ DNA Isolation Kit

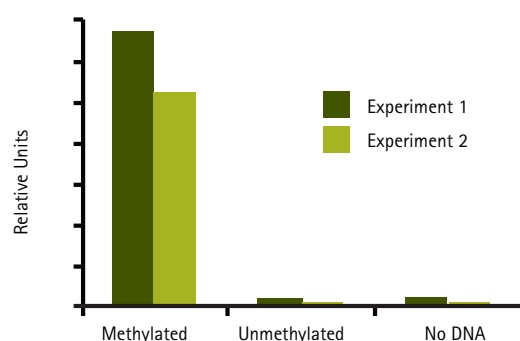
Simple, effective, and rapid enrichment of methylated DNA

Improve the specificity, reliability, and recovery of methylated DNA from genomic samples with the CpG MethylQuest™ DNA isolation kit. Featuring magnetic beads with a pre-bound recombinant methyl-binding domain (MBD) protein and a simple elution protocol, this high affinity kit enriches for methylated DNA from as little as 1 ng of DNA!

MethylQuest™ advantages:

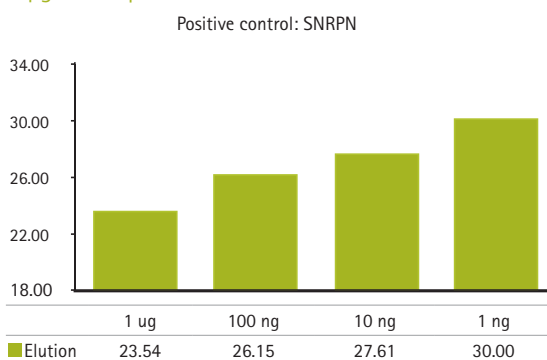
- Specific enrichment of methylated DNA fragments
- No detectable binding of unmethylated or hemimethylated regions
- Simple and fast 2-hour magnetic bead-based protocol
- GST-MBD2b capture protein pre-bound to magnetic beads for consistent results
- Reliable performance from 1 ng to 1 µg of DNA
- Elute ready-to-use DNA; avoid additional cleanup steps that reduce yields

Specific Binding of Methylated DNA



CpG MethylQuest™ MBD protein binds methylated DNA, but not unmethylated DNA. CpG MethylQuest™ protein was incubated with fully methylated or unmethylated p16 amplicons immobilized on magnetic beads, or a no-DNA control. Beads were washed and CpG MethylQuest™ protein was detected with an anti-GST antibody-horseradish peroxidase conjugate). The bars represent duplicate experiments.

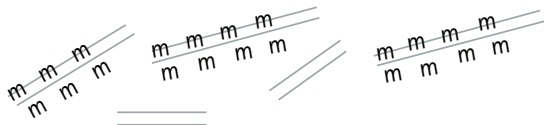
Reliable Methylated DNA Enrichment from 1 ng to 1 µg of Sample



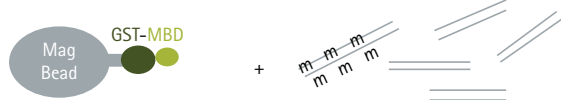
Quantitative PCR Analysis of Methylated DNA Enrichment With Varying Amounts of Input DNA. Sonicated MCF genomic DNA was purified with the CpG MethylQuest™ DNA Isolation Kit and eluted in TE (100 µL for 1 µg and 100 ng samples; 20 µL for 10 ng and 1 ng samples). Quantitative PCR was conducted on 2 µL of eluted DNA using primers for the imprinted SNRPN locus.

Rapid and Simple CpG MethylQuest™ Protocol

1. Fragment genomic DNA by restriction digestion



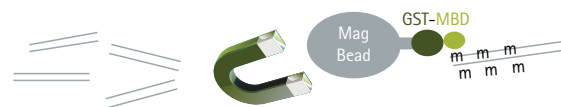
2. Add Fragmented DNA to CpG MethylQuest™ Beads



3. Incubate to allow binding of methylated DNA.



4. Remove or collect supernatant containing unmethylated DNA



5. Wash beads and heat to elute methylated DNA



Ordering Information

CpG MethylQuest™ DNA	30 reactions	17-10035
CpG MethylQuest™ Protein	100 mg	14-921

Accessory Products

CpGenome Universal Methylated DNA	10 µg	S7821
CpGenome Universal Unmethylated DNA	10 µg	S7822



www.merckmillipore.com/offices

CpG MethylQuest™ Protein for Custom Applications

For custom applications requiring the CpG MethylQuest™ Protein not bound to magnetic beads, you can order unbound CpG MethylQuest™ protein. With a GST and MBD2 domain joined by a thrombin cleavage site, this protein provides options for flexible assay development:

- Competitive elution with glutathione
- Elution of intact complexes by thrombin digestion
- Immobilization to other solid surfaces such as microtiter plates coated with GST antibodies
- Visualization of complexes using labeled GST antibodies or labeled secondary antibodies
- Chemical modification of surface cysteine group on the GST domain for the addition other reporters, affinity tags, or functional groups

To Place an Order or Receive Technical Assistance

In Europe, please call Customer Service:

France: 0825 045 645

Germany: 01805 045 645

Italy: 848 845 645

Spain: 901 516 645 Option 1

Switzerland: 0848 645 645

United Kingdom: 0870 900 4645

For other countries across Europe, please call: +44 (0) 115 943 0840

Or visit: www.merckmillipore.com/offices

For Technical Service visit:

www.merckmillipore.com/techservice

Get Connected!

Join Merck Millipore Bioscience on your favorite social media outlet for the latest updates, news, products, innovations, and contests!



facebook.com/MerckMilliporeBioscience



twitter.com/Merck4Bio