

Mouse ^{5hm}C & ^{5m}C DNA Set

Cat. No. D5019

Storage: -20 °C



ZYMO RESEARCH

The Beauty of Science is to Make Things Simple

Product Information

Highlights:

- Precisely quantified levels of 5-methylcytosine and 5-hydroxymethylcytosine verified via mass spectrometry (LC/MS)
- Useful control for detection methods of 5-methylcytosine or 5-hydroxymethylcytosine

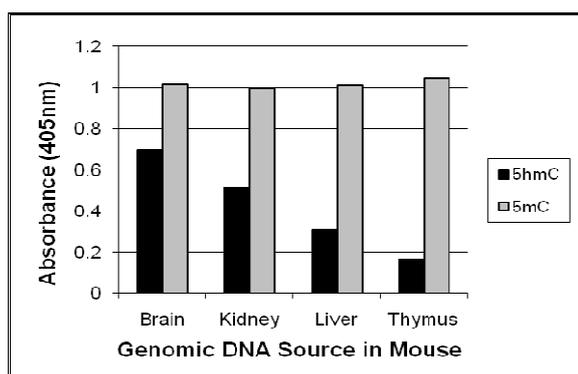
Product Contents:

| | Cat. # | Quantity | Storage Temp. |
|------------------|---------|--------------|---------------|
| Mouse Brain DNA | D5019-1 | 5 µg / 20 µl | -20°C |
| Mouse Kidney DNA | D5019-2 | 5 µg / 20 µl | -20°C |
| Mouse Liver DNA | D5019-3 | 5 µg / 20 µl | -20°C |
| Mouse Thymus DNA | D5019-4 | 5 µg / 20 µl | -20°C |

Description:

The **Mouse ^{5hm}C & ^{5m}C DNA Set** is a set of organ specific mouse genomic DNAs isolated from a pool of 8-10 week old Swiss Webster mice. This genomic DNA set is an ideal control for detection and/or quantification methods against 5-methylcytosine (^{5m}C) and 5-hydroxymethylcytosine (^{5hm}C) as both modified cytosines are present at physiologically relevant levels and loci. The levels of 5-methylcytosine and 5-hydroxymethylcytosine within the **Mouse ^{5hm}C & ^{5m}C DNA Set** have been precisely quantified by mass spectrometry (LC/MS) and been validated to be consistent by ELISA. Percentages of each modified cytosine are listed below.

| | Brain | Kidney | Liver | Thymus |
|--------------------|-------|--------|-------|--------|
| ^{5hm} C % | 0.548 | 0.225 | 0.107 | 0.030 |
| ^{5m} C % | 8.06 | 6.62 | 7.13 | 7.54 |



Mouse ^{5hm}C & ^{5m}C DNA Set ELISA Assay

Anti-5-methylcytosine or anti-5-hydroxymethylcytosine antibodies were confidently able to reproduce trends in levels of 5-methylcytosine and 5-hydroxymethylcytosines quantified by mass spectrometry.

Product Specifications:

- Source:** Swiss Webster mice, 8-10 weeks old.
Concentration: 250 ng/µl in modified TE buffer (10mM Tris-HCl; 0.1mM EDTA; pH 8.0).
Storage: ≤ -20 °C

Also Available:

| Product Name | Size | Catalog number |
|---|-----------|----------------|
| EZ DNA Methylation™ Kit | 50 | D5001 |
| | 200 | D5002 |
| | 2 x 96 | D5003 |
| | 2 x 96 | D5004 |
| EZ DNA Methylation-Gold™ Kit | 50 | D5005 |
| | 200 | D5006 |
| | 2 x 96 | D5007 |
| | 2 x 96 | D5008 |
| EZ DNA Methylation-Direct™ Kit | 50 | D5020 |
| | 200 | D5021 |
| | 2 x 96 | D5022 |
| | 2 x 96 | D5023 |
| EZ DNA Methylation-Startup™ Kit | 1 Kit | D5024 |
| EZ Bisulfite DNA Clean-up Kit™ | 50 | D5025 |
| | 200 | D5026 |
| | 2 x 96 | D5027 |
| | 2 x 96 | D5028 |
| Universal Methylated DNA Standard | 1 set | D5010 |
| Universal Methylated Human DNA Standard | 1 set | D5011 |
| Universal Methylated Mouse DNA Standard | 1 set | D5012 |
| Bisulfite Converted Universal Methylated Human DNA Standard | 1 set | D5015 |
| <i>E. coli</i> Non-methylated Genomic DNA | 5 µg | D5016 |
| Methylated-DNA IP Kit | 10 | D5101 |
| ChIP DNA Clean & Concentrator™ | 50 | D5201 |
| | 50 | D5205 |
| Anti-5-Methylcytosine Monoclonal Antibody (clone 10G4) | 50 µg | A3001-50 |
| | 200 µg | A3001-200 |
| Zymo <i>Taq</i> ™ DNA Polymerase | 50 | E2001 |
| | 200 | E2002 |
| Zymo <i>Taq</i> ™ PreMix (2X concentrated) | 50 | E2003 |
| | 200 | E2004 |
| CpG Methylase (M.SssI) | 200 units | E2010 |
| | 400 units | E2011 |

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This product is for research use only and should only be used by trained professionals. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your research institution or facility.

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