

# Human Matched DNA Set

Cat. No. D5018

Storage: -20 °C



ZYMO RESEARCH

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## Product Information

### Highlights:

- Matched set of human genomic DNA from brain and spleen originating from a single individual
- Precisely quantified levels of 5-methylcytosine & 5-hydroxymethylcytosine via LC/MS
- Useful control for detection methods of 5-methylcytosine or 5-hydroxymethylcytosine

### Product Contents:

	Cat. #	Quantity	Storage Temp.
Human Brain DNA	D5018-1	5 µg / 20 µl	-20°C
Human Spleen DNA	D5018-2	5 µg / 20 µl	-20°C

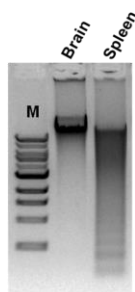
### Description:

The **Human Matched DNA Set** is a set of organ specific human genomic DNAs originating from a single individual. This set is an ideal control for detection and/or quantification methods against 5-methylcytosine (<sup>5m</sup>C) and 5-hydroxymethylcytosine (<sup>5hm</sup>C) as both modified cytosines are present at physiologically relevant levels and loci. The levels of 5-hydroxymethylcytosine within the **Human Matched DNA Set** have been quantified and are listed below.

	Brain	Spleen
<sup>5m</sup> C	6.93 %	6.75 %
<sup>5hm</sup> C	1.89 %	0.18 %

### LC/MS Quantification

500ng of brain and spleen gDNA from Human Matched DNA Set were digested with DNA Degradase Plus [Cat. No. E2020] for 1 hour. Processed DNA was subsequently run on LC/MS for precise global quantification of <sup>5m</sup>C and <sup>5hm</sup>C percentages.



### Match Set Human Genomic DNA

1 µg of Brain and Spleen gDNA were resolved in a 0.8% agarose gel. "M" denotes 1 kb DNA ladder (Zymo Research Corp.).

*Note: Some degradation of genomic DNA originating from organs may be unavoidable due to processing time of tissue post-mortem.*

\*\*For human genomic DNA with extremely low levels (<0.03%) of 5-hydroxymethylcytosine, please refer to Human HCT116 DKO Non-methylated DNA (Zymo Research Corp., Cat. No. D5014-1).

### Product Specifications:

**Source:** Human male  
**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	Cat. No.
<b>5-HYDROXYMETHYLCYTOSINE</b>		
Quest 5-hmC Detection Kit™	25 Preps. 50 Preps.	D5410 D5411
Quest 5-hmC Detection Kit™ - Lite	25 Preps. 50 Preps.	D5415 D5416
Human Matched DNA Set	2 x 5 µg	D5018
Mouse 5hmC & 5mC DNA Set	4 x 5 µg	D5019
5-hmC Glucosyltransferase	100 units 200 units	E2026 E2027
5-Hydroxymethyl dCTP [100mM]	10 µmol	D1045
5-Methyl dCTP [10mM]	1 µmol	D1035
5-Methylcytosine & 5-Hydroxymethylcytosine DNA Standard Set	1 set	D5405
<b>BISULFITE TREATMENT OF DNA</b>		
EZ DNA Methylation-Direct™ Kit	50 rxns.	D5020
	200 rxns.	D5021
	2 x 96 rxns.	D5022
	2 x 96 rxns.	D5023
<b>METHYLATED/NON-METHYLATED DNA STANDARDS</b>		
Universal Methylated DNA Standard	1 set	D5010
Universal Methylated Human DNA Standard	1 set	D5011
Universal Methylated Mouse DNA Standard	1 set	D5012
Human Methylated and Non-methylated DNA Set	1 set	D5014
Human HCT116 DKO Non-methylated DNA Standard	5 µg	D5014-1
Human HCT116 DKO Methylated DNA Standard	5 µg	D5014-2
Bisulfite Converted Universal Methylated Human DNA Standard	1 set	D5015
<i>E. coli</i> Non-methylated Genomic DNA	5 µg	D5016
<b>AMPLIFICATION OF BISULFITE CONVERTED DNA</b>		
Zymo Taq™ DNA Polymerase	50 rxns.	E2001
	200 rxns.	E2002
Zymo Taq™ PreMix (2X concentrated)	50 rxns.	E2003
	200 rxns.	E2004
<b>ANTIBODIES &amp; IMMUNOPRECIPITATION</b>		
Methylated-DNA IP Kit	10 preps.	D5101
ChIP DNA Clean & Concentrator™	50 preps.	D5201
	50 preps.	D5205
Anti-5-Methylcytosine Monoclonal Antibody (clone 10G4)	50 µg	A3001-50
	200 µg	A3001-200
<b>DNA FRAGMENTATION</b>		
DNA Degradase™	500 U	E2016
	2000 U	E2017
DNA Degradase Plus™	250 U	E2020
	1000 U	E2021
DNA Shearase™	50 U	E2018-50
	200 U	E2018-200
	50 U & DCC™	E2019-50
	200 U & DCC™	E2019-200
<b>NUCLEOSOME MAPPING</b>		
EZ Nucleosomal DNA Prep Kit	20 preps	D5220

### Trademarks and Disclaimers:

™ Trademarks of Zymo Research Corporation.

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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