

5-Hydroxymethylcytosine dNTP Mix [10mM]

Cat. No. D1040

Storage: -20 °C



ZYMO RESEARCH

The Beauty of Science is to Make Things Simple

Product Information

Highlights:

- Ready to use 5-Hydroxymethylcytosine dNTP mix (dATP, dTTP, dGTP, d^{5hm}CTP) is of ultra high purity; >99% trisphosphate by HPLC.
- Readily incorporated into PCR amplicons with *ZymoTaq*[™] or other DNA polymerases.
- Free of endo-, exodeoxyribonuclease, ribonuclease, phosphatase and nicking activities

Description:

5-Hydroxymethylcytosine dNTP Mix from Zymo Research is of ultra high purity and can be used to generate DNA by PCR using *ZymoTaq*[™] or other DNA polymerases.

Applications:

PCR amplicons containing 5-hydroxymethylcytosine are useful in a variety of applications such as:

- The study of 5-hydroxymethylcytosine binding/interacting proteins
- Define methods that distinguish between 5-methylcytosine and 5-hydroxymethylcytosine.

Concentration: 2.5 µmol/250 µl as a [10 mM] solution. Contains [2.5 mM] of each dNTP (dATP, dTTP, dGTP and d^{5hm}CTP).

Storage Condition: 5-Hydroxymethylcytosine dNTP Mix is guaranteed for 12 months at -20°C. Avoid multiple freeze/thaw cycles. For long-term storage, aliquoting is recommended with storage at -80°C.

Proposed Reaction Setup using *ZymoTaq*[™] (Cat. Nos. E2001 & E2002):

Reagent	Volume	Final conc.
2X Reaction Buffer	25 µl	1X
dNTP Mix (10 mM)	5 µl	0.25 mM each dNTP
Forward Primer (10 µM)	Variable	0.3 to 1 µM
Reverse Primer (10 µM)	Variable	0.3 to 1 µM
Template DNA	Variable	< 200 ng/50 µl
<i>ZymoTaq</i> [™] DNA Polymerase (5 U/µl)	1 µl	5 U/50 µl
ddH ₂ O	to 50 µl	–
Total volume	50 µl	

Note: The final concentration of MgCl₂ in the reaction (above) is 1.75 mM. If required, scale reaction reagent volumes accordingly to optimize the MgCl₂, primer, and/or template concentrations.

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
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 200 µg	A3001-50 A3001-200
<i>ZymoTaq</i> [™] DNA Polymerase	50	E2001
	200	E2002
<i>ZymoTaq</i> [™] PreMix (2X concentrated)	50	E2003
	200	E2004
CpG Methylase (M.SssI)	200 units	E2010
	400 units	E2011
dsDNA Shearase [™]	50 units	E2018-50
	200 units	E2018-200
EZ Nucleosomal DNA Prep Kit	20 Preps.	D5220
5-Hydroxymethylcytosine		
5-Methylcytosine & 5-Hydroxymethylcytosine DNA Standard Set	1 set	D5405
DNA Degradase [™]	500 units	E2016
	2,000 Units	E2017
DNA Degradase Plus [™]	250 units	E2020
	1,000 Units	E2021

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.

The Polymerase Chain Reaction (PCR) process is covered by U.S. Patent: #4,683,195; 4,683,202 assigned to Hoffmann-La Roche. Patent pending in other countries. No license under these patents to use the PCR process is conveyed expressly or by implication to the purchaser by the purchase of Zymo Research's products. Further information on purchasing licenses to practice the PCR process can be obtained from the director of Licensing at Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404 or at Roche Molecular Systems, Inc., 1145 Atlantic Avenue, Alameda, California 94501.

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