

Epigenetics

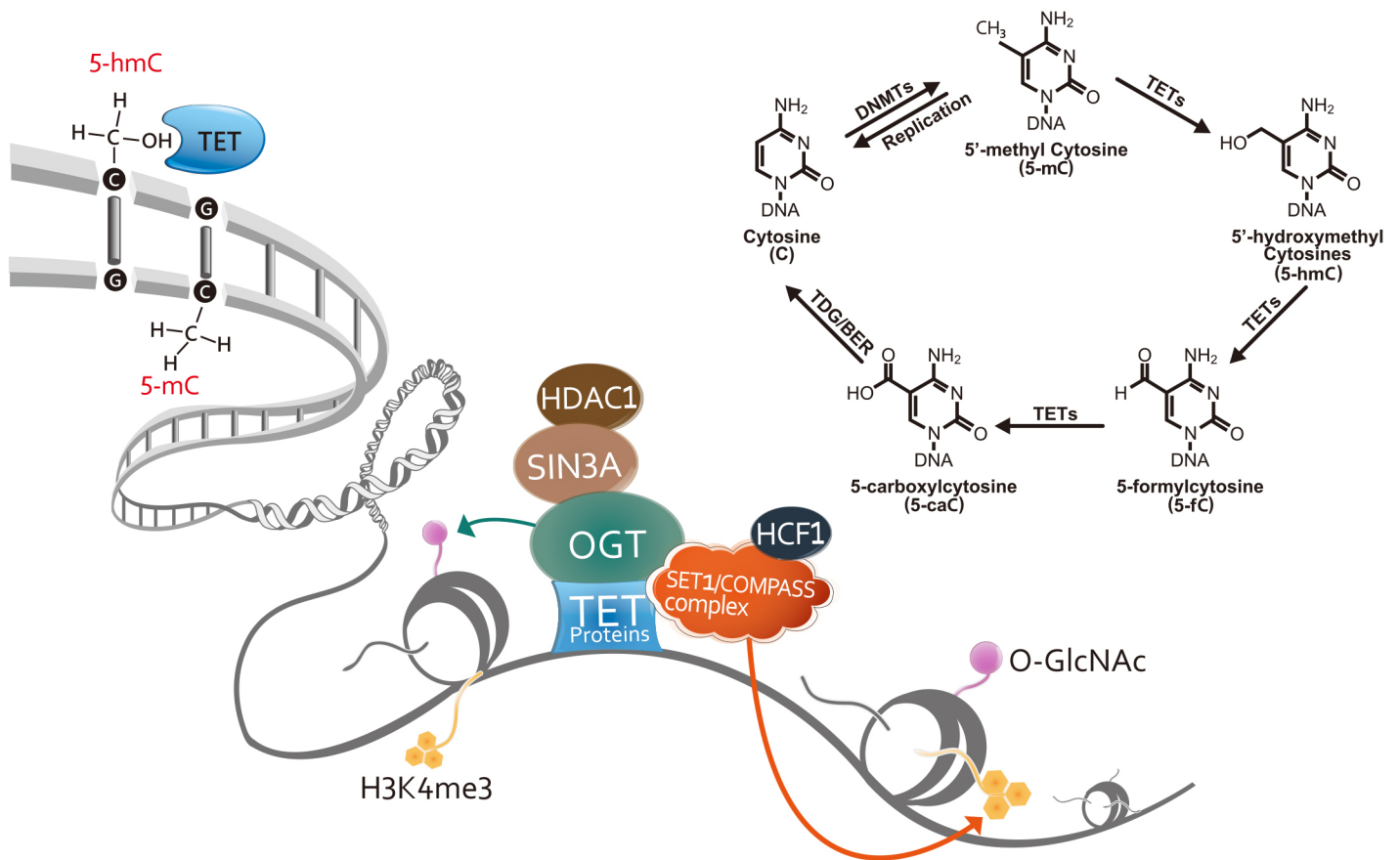
DNA Methylation

www.genetex.com

Your Expertise

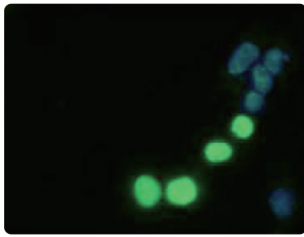
Our Antibodies

Accelerated Discovery

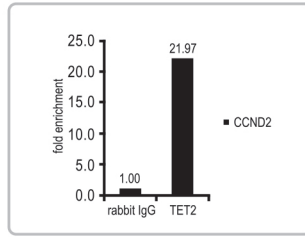


The three mammalian 5-methylcytosine (5-mC) dioxygenases (Ten Eleven Translocation (TET); TET1, TET2, and TET3 in humans) convert 5-mC to 5-hydroxymethylcytosine (5-hmC) and subsequently to 5-formylcytosine (5-fC) and 5-carboxylcytosine (5-caC). This series of modifications is thought to represent one pathway to active DNA demethylation, thereby reshaping the methylated DNA landscape established by DNA methyltransferases (DNMTs). In addition, these marks, particularly 5-hmC, have been shown to be distinct epigenetic signatures in their own right impacting stem cell and cancer cell biology.

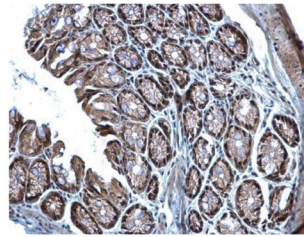
GeneTex introduces a selection of antibodies to targets relevant to DNA methylation and demethylation. We are proud to note that many of these antibodies are suitable for **ChIP/ (h)MeDIP** application.



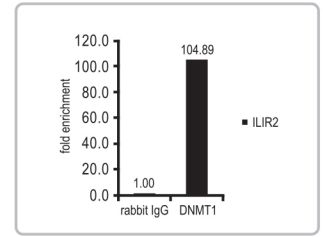
TET1 antibody [GT1462] (GTX627420)
 ICC/IF analysis with TET1 antibody on TET1-transfected 293T cells.



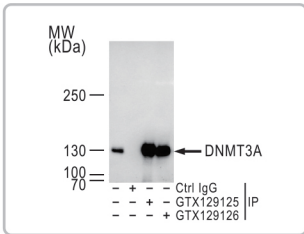
TET2 antibody [N2-2], N-term (GTX124205)
 ChIP assay with TET2 antibody on U2O2 chromatin extract.



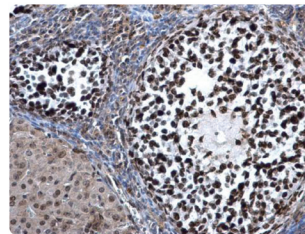
TET3 antibody [C3], C-term (GTX121453)
 IHC-P analysis with TET3 antibody on mouse colon tissue.



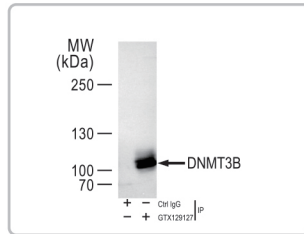
DNMT1 antibody [N1], N-term (GTX116011)
 ChIP assay with DNMT1 antibody on HCT116 chromatin extract.



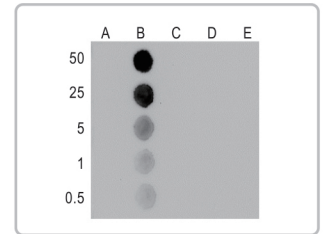
DNMT3A antibody (GTX129125)
 IP analysis with DNMT3A antibody on 293T whole cell extract.



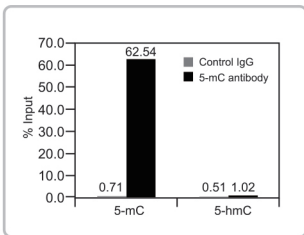
DNMT3A antibody (GTX129125)
 IHC-P analysis with DNMT3A antibody on mouse ovary tissue.



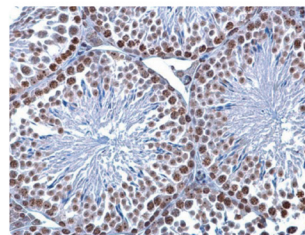
DNMT3B antibody (GTX129127)
 IP analysis with DNMT3B antibody on nuclear extracts of K562 cells.



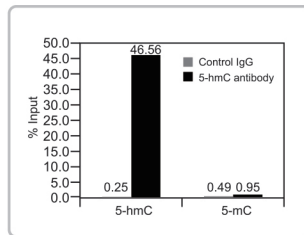
5-mC antibody [GT4111] — MeDIP grade (GTX629448)
 Dot blot analysis with 5-mC antibody on (A) unmethylated DNA, (B) 5-mC DNA, (C) 5-hmC DNA, (D) 5-fC DNA, and (E) 5-caC DNA.



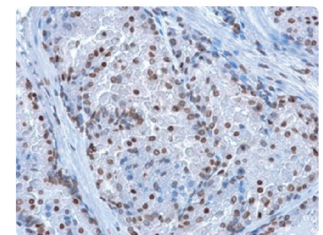
5-mC antibody [GT4111] — MeDIP grade (GTX629448)
 MeDIP analysis with 5-mC antibody on human genomic DNA mixed with 5-methylcytosine or 5-hydroxymethylcytosine DNA fragment.



5-mC antibody [GT4111] — MeDIP grade (GTX629448)
 IHC-P analysis with 5-mC antibody on mouse testis tissue.



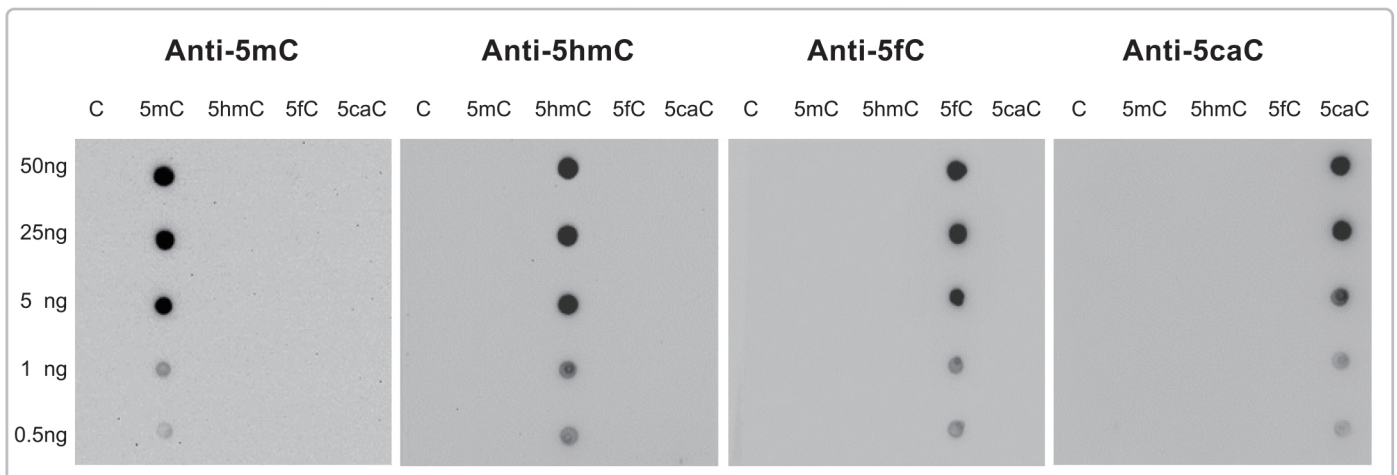
5-hmC antibody — MeDIP grade (GTX629765)
 MeDIP analysis with 5-hmC antibody on human genomic DNA mixed with 5-methylcytosine or 5-hydroxymethylcytosine DNA fragment.



5-hmC antibody — MeDIP grade (GTX629765)
 IHC-P analysis with 5-hmC antibody on mouse prostate tissue.

Methylated Cytosine DNA Standard Kit (GTX400004)

The oligonucleotides used as positive controls in the methylation experimental assays



Methylated Cytosine DNA Standard Kit (GTX400004)

GeneTex methylated cytosine DNA standard kit includes five recombinant double-strand DNA fragments: unmethylated cytosine DNA (C), 5-methylated cytosine DNA (5mC), 5-hydroxymethylcytosine cytosine DNA (5hmC), 5-formylcytosine cytosine DNA (5fC), 5-carboxylcytosine cytosine DNA (5caC). Each methylated cytosine DNA was spotted onto a positively charged nylon membrane and subjected to Dot blot assay with corresponding antibodies.

TET Family Antibodies

Citation Support KO/KD Validated

Cat. No.	Product Name	Clonality	Reactivity	Application
GTX627420	TET1 antibody [GT1462]	Ms mAb	Hu	ICC/IF, IHC-P, IP, WB, ChIP assay
GTX124207	TET1 antibody [N3C1]	Rb pAb	Hu, Ms, Mk	ICC/IF, IHC, IHC-P, IP, WB, ChIP assay
GTX125888	TET1 antibody [N1], N-term	Rb pAb	Hu, Ms	ICC/IF, WB
GTX629974	TET1 antibody [GT465]	Ms mAb	Hu	WB
GTX124205	TET2 antibody [N2-2], N-term	Rb pAb	Hu	ICC/IF, IHC-P, IP, WB, ChIP assay
GTX629879	TET2 antibody [GT411]	Ms mAb	Hu	IP, WB
GTX131099	TET2 antibody	Ms pAb	Hu	WB, ChIP assay
GTX629881	TET2 antibody [GT649]	Ms mAb	Hu	IP, WB, ChIP assay
GTX124204	TET2 antibody [N2], N-term	Rb pAb	Hu	ICC/IF, IP, WB, ChIP assay
GTX629880	TET2 antibody [GT442]	Ms mAb	Hu	IP, WB
GTX121453	TET3 antibody [C3], C-term	Rb pAb	Hu, Ms, XI, Bov	ICC/IF, IHC-P, IP, WB, IHC-Wm, ChIP assay
GTX628257	TET3 antibody [GT334]	Ms mAb	Hu	WB
GTX121452	TET3 antibody [N3C1], Internal	Rb pAb	Hu	WB

Representative Citations : **TET1 antibody [GT1462] (GTX627420)**
Nat Genet. 2018 Jan;50(1):83-95. (**ChIP assay**)
Cell. 2015 Jan 15;160(1-2):253-68 (**ICC/IF**)

TET1 antibody [N3C1] (GTX124207)
Nucleic Acids Res. 2016 Sep 30;44(17):8153-64. (**ICC/IF,IP**)
Cell Rep. 2012 Sep 27;2(3):568-79. (**ChIP assay, IHC**)

TET2 antibody [N2-2], N-term (GTX124205)
Stem Cells Dev. 2014 Jul 14. [Epub ahead of print] (**ICC/IF**)

TET3 antibody [C3], C-term (GTX121453)
Nature. 2015 Sep 17;525(7569):389-393. (**WB**)
Cell. 2012 Dec 7;151(6):1200-13. (**WB**)

DNMT Family Antibodies

Citation Support KO/KD Validated

Cat. No.	Product Name	Clonality	Reactivity	Application
GTX116011	DNMT1 antibody [N1], N-term	Rb pAb	Hu	ICC/IF, IHC-P, IP, WB, ChIP assay
GTX30364	DNMT1 antibody	Rb pAb	Hu	ICC/IF, IHC-P, IP, WB
GTX48548	DNMT1 antibody [60B1220.1]	Ms mAb	Hu, Ms, Zfsh	IHC-P, IP, WB, ChIP assay
GTX88801	DNMT1 antibody, Internal	Gt pAb	Hu	ELISA, IHC-P, WB
GTX59650	DNMT2 antibody	Rb pAb	Hu, Ms	ICC/IF, WB
GTX129125	DNMT3A antibody	Rb pAb	Hu, Ms, Rat	ICC/IF, IHC-P, IP, WB, EM
GTX129126	DNMT3A antibody	Rb pAb	Hu, Ms, Rat	IP, WB
GTX30365	DNMT3A antibody	Rb pAb	Hu	ICC/IF, IHC, IP, WB
GTX125917	DNMT3B antibody	Rb pAb	Hu	WB
GTX129127	DNMT3B antibody	Rb pAb	Hu, Rat	ICC/IF, IHC-P, IP, WB

Representative Citations : **DNMT1 antibody [N1], N-term (GTX116011)**
J Cell Sci. 2014 Jan 1;127(Pt 1):85-100. (**WB**)
Cancer. 2011 Jul 15;117(14):3209-21. (**ChIP assay**)

5mc & 5hmc Antibodies

Citation Support

Cat. No.	Product Name	Clonality	Reactivity	Application
GTX629448	5-Methylcytosine / 5-mC antibody [GT4111] - MeDIP grade	Ms mAb	Other	Dot, EM, IHC-Wm, IHC-P, MeDIP
GTX75897	5-Methylcytosine / 5-mC antibody [33D3]	Ms mAb	Other	ELISA, FACS, ICC/IF, IHC-Fr, IHC-P, WB, MeDIP
GTX629765	5-Hydroxymethylcytosine / 5-hmC antibody - hMeDIP grade	Ms mAb	Other	Dot, IHC-Fr, IHC-P, hMeDIP
GTX60802	5-Hydroxymethylcytosine / 5-hmC antibody - hMeDIP grade	Rb pAb	Other	Dot, IHC-P, ELISA, IP, hMeDIP

Representative Citations : **5-Methylcytosine / 5-mC antibody [33D3] (GTX75897)**
Exp Cell Res. 2010 Nov 15;316(19):3150-60. (**ICC/IF**)

Small-Package Antibody Panels

Citation Support KO/KD Validated

Cat. No.	Product Name	Item	Clonality	Application
GTX300098	TET Family	TET1 antibody [N3C1]	Ms mAb	ICC/IF, IHC-P, IP, WB, ChIP assay
		TET2 antibody [N2-2], N-term	Rb pAb	ICC/IF, IHC-P, IP, WB, ChIP assay
		TET3 antibody [C3], C-term	Rb pAb	ICC/IF, IHC-Wm, IHC-P, IP, WB, ChIP assay
		Rabbit IgG antibody (HRP)	Gt pAb	Dot, ICC/IF, IHC-P, ELISA, WB
GTX300099	TET Family, 5-mC, and 5-hmC	TET1 antibody [N3C1]	Ms mAb	ICC/IF, IHC-P, IP, WB, ChIP assay
		TET2 antibody [N2-2], N-term	Rb pAb	ICC/IF, IHC-P, IP, WB, ChIP assay
		TET3 antibody [C3], C-term	Rb pAb	ICC/IF, IHC-Wm, IHC-P, IP, WB, ChIP assay
		5-Hydroxymethylcytosine antibody [GT513]	Ms mAb	Dot, MeDIP
		5-Methylcytosine antibody [GT4111]	Ms mAb	Dot, EM, IHC-P, IHC-Wm, MeDIP
		Mouse IgG antibody (HRP)	Gt pAb	ICC/IF, ELISA, IHC, WB
GTX300100	5-mC and 5-hmC antibody panel	5-Hydroxymethylcytosine antibody [GT513]	Ms mAb	Dot, MeDIP
		5-Methylcytosine antibody [GT4111]	Ms mAb	Dot, EM, IHC-P, IHC-Wm, MeDIP
		Mouse IgG antibody (HRP)	Gt pAb	ICC/IF, ELISA, IHC, WB

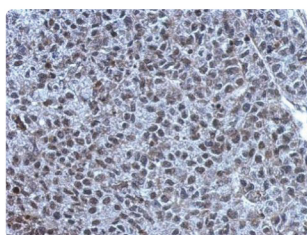
Representative Citations : Rabbit IgG antibody (HRP) (GTX213110-01)
Autophagy. 2014 Jul;10(7):1179-92. (WB)
Brain Behav Immun. 2012 Mar;26(3):459-68. (WB)

Mouse IgG antibody (HRP) (GTX213111-01)
Sci Rep. 2014 May 16;4:5004. (WB)
PLoS One. 2014 Apr 8;9(4):e93394. (WB)

Methylated Cytosine DNA Standard Kit

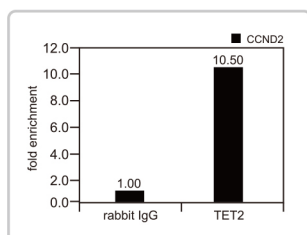
Cat. No.	Product Name	Item	Package	Conc.
GTX400004	Methylated Cytosine DNA Standard Kit	Cytosine DNA Standard	2 µg	50 ng/µl
		5-Methylcytosine DNA Standard	2 µg	50 ng/µl
		5-Hydroxymethylcytosine DNA Standard	2 µg	50 ng/µl
		5-formylcytosine cytosine DNA Standard	2 µg	50 ng/µl
		5-carboxylcytosine cytosine DNA Standard	2 µg	50 ng/µl

Citation Support KO/KD Validated



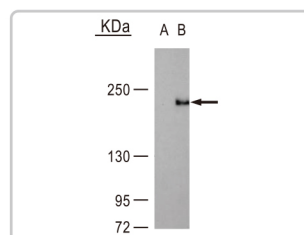
TET1 antibody [N3C1]
(GTX124207)

IHC-P analysis with TET1 antibody on HeLa xenograft.



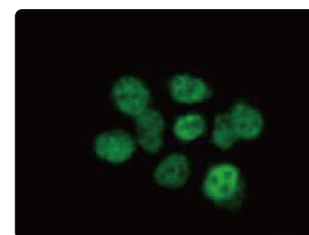
TET2 antibody (GTX131099)
— ChIP grade

ChIP analysis with TET2 antibody on chromatin extract of U2OS cells.



TET3 antibody [GT334]
(GTX628257)

WB analysis with TET3 antibody on TET3-transfected 293T cells.



DNMT1 antibody [N1], N-term
(GTX116011)

ICC/IF analysis with DNMT1 antibody on A431 cells.



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