

# Epigenetic Modifications

Histone modifications and DNA methylation are epigenetic marks that effect gene expression patterns. This poster highlights the different types of epigenetic modifications, modifier enzymes and Histone modification binding proteins. The poster was created by Tony Kouzarides and Andy Bannister of the Gurdon Institute in association with Abcam.

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### Proteins

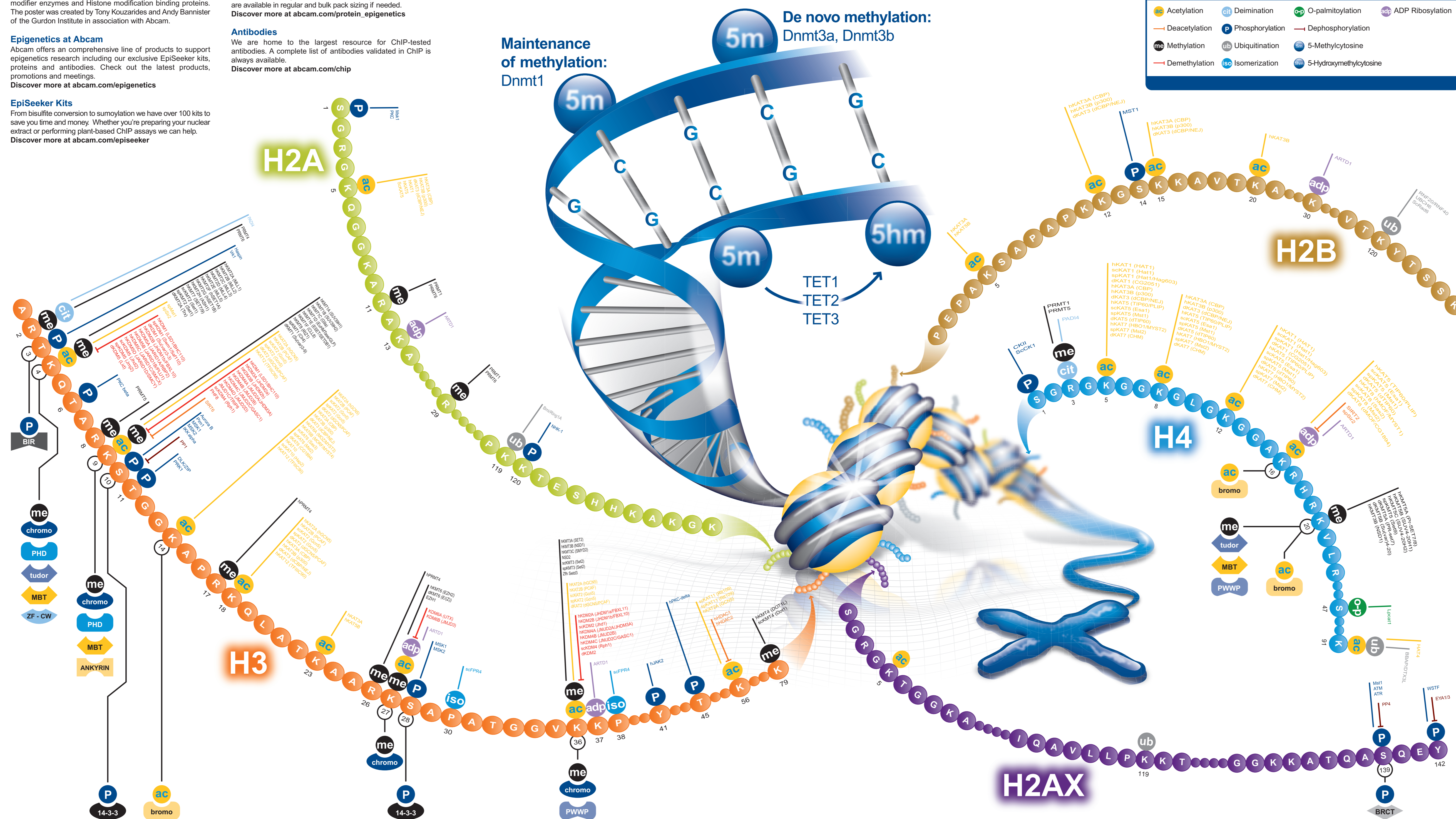
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### Key | Histone modification binding proteins

#### Chromodomain proteins

CHD1	H3K4me2/3
HP1/spSwi6	H3K9me2/3
spChp1	H3K9me2/3?
CDY1	H3K9me2/3
PC1/PC2/PC/LHP1	H3K27me3, H3K9me3
MSL3	H3K36me3
hMRG15	H3K36me, H3K4me
scEaf3	H3K36me, H3K4me
CBX1,3,5	H3K9me3/2
MPP8	H3K9me3/2
Tip60	H3K9me3/2
CBX2,4,6,7,8	H3K27/K9me3/2

#### MBT Proteins

PHF20L1	H3K4me1, H4K20me1
SFBT	H3K9me1/2, H4K20me1/2
L3MBTL1	H4K20me1/2, H1bK26me1/2
L3MBTL1	H3K20me
L3MBTL1/2	H3K9me
MBTD1	H3K20me

#### PHD Proteins

scYng1	H3K4me2/3
ING1,2,3,4,5	H3K4me2/3
BPTF/dmNURF301	H3K4me2/3
scSpp1	H3K4me2/3
scSet3	H3K4me2/3
scJhd1	H3K4me3
RAG2	H3K4me3
TAF3	H3K4me3
ICBP90 (Np95)	H3K9me2/3
JARID1C	H3K9me3
JARID1A	H3K4me2/3
KJAA1718	H3K4me2/3
Lid	H3K4me2/3
MLL1	H3K4me2/3
PHF2,8	H3K4me2/3
PHO23	H3K4me2/3
Pygo	H3K4me2/3
CHD4	H3K9me
ICBP90	H3K9me
SMCX	H3K9me
DPF3	H3K14ac

#### 14-3-3 Proteins

14-3-3	H3S10ph, H3S28p
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#### Tudor Proteins

JMJD2A	H3K4me3, H4K20me3
S3BP1	H4K20me1/2
spCr2	H4K20me2
PHF20	H4K20me2
TDRD3	H3R17me2a, H4R3me2a
scSg29	H3K4me2/3

#### Bromodomain proteins

Polybromo/BAF180	H3ac
scSnf2	H3ac, H4ac
Brd2,3,4,7	H3ac, H4ac
TAF1	H3ac, H4ac
P/CAF	H3ac, H4ac, H4K16ac
CBP/p300	H3ac, H4ac
scBdf1	H4ac
hBRG1	H3K14ac
scRsc1,2,4	H3K14ac (Rsc4)
scGcn5	H4ac, H4K16ac
ATAD2	H3K14ac
BRD7	H4K5 and 8ac, H3K18ac
CBP/p300	H4K20ac, H3K36ac
GCN5	H4K16ac
PB-2	H3K14ac
TRIM24	H3K23ac

#### ZF-CW proteins

ZF-CW	ZCWPW1	H3K4me1/2
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#### ANKYRIN proteins

ANKYRIN	G9a/GLP	H3K9me2/1
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#### PWWP proteins

PWWP	BRPF1	H3K36me3
	DNMT3A	H3K36me3
	PDP1	H4K20me1

#### BRCT proteins

BRCT	MDC1	H2AXS139ph
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#### BIR proteins

BIR	Survivin	H3T3ph
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