

## NEW Proteins and Substrates for Epigenetic Research

modified nucleosomes, histones, and octamers

Whether you are performing drug discovery research, monitoring changes in histone modifications, screening or analyzing enzyme kinetics, Active Motif's Recombinant Histones & Nucleosomes are biologically relevant substrates for your assays. Our protein toolbox includes all classes of histones, readers, writers, erasers and transcription factors. We also offer validated antibodies to the majority of these protein targets, specializing in highly specific antibodies to histone post-translational modifications.

- ✓ **Recombinant Nucleosomes** - pre-assembled and designed to contain histone variants and amino acid point mutations implicated in tumorigenesis. H3.3 K27M and other mutant nucleosomes are useful for studying PRC2 activity in pediatric DIPG and GBM, as well as chondroblastoma and giant cell tumors of bone.
- ✓ **Recombinant Histones, Modified Histones, and Histone Octamers** - Histones H3.1, H2A, H2B, H2A.Z, H2A.X, H3.3, testis specific and H2A.Bbd with and without site specific post-translational modifications.
- ✓ **Recombinant Proteins and Active Enzymes** - Histone modifying enzymes and readers relevant for drug discovery including EZH2 (PRC2), LSD1, DOT1L, p300, BRD4, and more.
- ✓ **Available in Bulk Sizes** - for high throughput screening or long-term studies.

### Wild Type and Mutant Nucleosomes -

*designed to contain key amino acid point mutations*

Product	Catalog No.
Nucleosomes (H3.1)	31466
Nucleosomes (H3.3)	31468
Nucleosomes H3.3 (K27M)	31562
Nucleosomes H3.3 (G34L)	31558
Nucleosomes H3.3 (G34R)	31559
Nucleosomes H3.3 (G34V)	31560
Nucleosomes H3.3 (G34W)	31561
Nucleosomes H3.3 (K36M)	31563

### Antibodies for Readers, Writers, & Erasers, including:

Product	Catalog No.
EZH2 Thr345Ph antibody	61241
EZH2 antibody (mAb)	39875
EZH2 antibody (pAb)	39901
Histone H3K27ac antibody	39133
Histone H3K27me3 anti-	39155
Histone H3K4me3 antibody	39159

## Histones

Description	Cat. No.
Histone H2A (H)	31490
Histone H2A.Z	31293
Histone H2B (H)	31492
Histone H3.1 (H)	31294
Histone H3.1 biotin (H)	31296
Histone H3.2 biotin (H)	31271
Histone H3.3 biotin (H)	31297
Histone H3.3 (H)	31295
Histone H3.3 (K27M)	31552
Histone H3.3 (G34L)	31548
Histone H3.3 (G34R)	31549
Histone H3.3 (G34V)	31550
Histone H3.3 (G34W)	31551
Histone H3.3 (K36M)	31553

(H) = Human

## Modified Histones

Description	Cat. No.
Histone H3K4me1 (EPL)	31287
Histone H3K4me1 (MLA)	31208
Histone H3K4me3 (EPL)	31278
Histone H3K4me3 (MLA)	31210
Histone H3K9me3 (EPL)	31279
Histone H3K27ac	31290
Histone H3K27me1 (MLA)	31214
Histone H3K27me2 (MLA)	31215
Histone H3K27me3 (MLA)	31579
Histone H3K79me1 (MLA)	31220
Histone H3K79me2 (MLA)	31221
Histone H3K79me3 (MLA)	31581
Histone H3K9me3 (EPL)	31279

## Nucleosomes

Description	Cat. No.
Histone Octamer (H3.1)	31470
Histone Octamer (H3.3)	31472
Mononucleosomes (H3.1) biotin	31278
Mononucleosomes (H3.3) biotin	31467
Nucleosomes (H3.1)	31466
Nucleosomes (H3.3)	31468
Nucleosomes H3.3 (K27M)	31562
Nucleosomes H3.3 (G34L)	31558
Nucleosomes H3.3 (G34R)	31559
Nucleosomes H3.3 (G34V)	31560
Nucleosomes H3.3 (G34W)	31561
Nucleosomes H3.3 (K36M)	31563
Nucleosomes (H2A.Bbd) biotin	31556
Nucleosomes (Th2b) biotin	31557

## Bromodomains

Description	Cat. No.
BAZ1B (1340 - 1457)	31444
BRD1 (556 - 688)	31438
BRD2 (344 - 455)	31378
BRD2 (71 - 194)	31442
BRD3 (24 - 144)	31379
BRD3 (306 - 416)	31377
BRD4 (333 - 460)	31446
BRD4 (44 - 168)	31380
BRD7 (129 - 236)	31381
BRD7 (129 - 236), GST-tag	31480
BRD9 (130 - 259)	31382
BRD9 (130 - 259) GST-tag	31488
BRDT (21 - 137)	31450
BRDT (257 - 382), GST-tag	31483

## Methyltransferases & Hydroxylases

Description	Cat. No.
CARM1 / PRMT4	31347
DNMT1	31335
DNMT1	31404
DOT1L (1 - 416)	31474
EZH2 Complex	31337
MLL1 Complex	31423
NSD1 - SET	31475
NSD2 (E1099K)	31546
PRC2 Complex	31387
SET2	31358
SETDB1	31452
TET1	31363
TET1 (1418 - 2136)	31417
TET2 (1129 - 2002)	31418
TET3 (824 - 1795)	31421

## Demethylases

Description	Cat. No.
JARID1A / KDM5A	31431
JARID1B / KDM5B	31432
JARID1B / KDM5B (2 - 751)	31518
JMJD1A / KDM3A	31456
JMJD1B / KDM3B	31429
JMJD2A / KDM4A	31457
JMJD2C / KDM4C	31458
KDM1B / LSD2	31479
LSD1 / KDM1A	31507
LSD1 / KDM1A	31426

## Acetyltransferases & Deacetylases

Description	Cat. No.
CREBBP (1081 - 1197)	31373
p300	31124
p300, Catalytic Domain	31205
GCN5	31204
HDAC1	31504
HDAC2	31505
HDAC3 / NCOR2 Complex	31526
HDAC6	31346
HDAC6	31543
HDAC8, His Tag	31566

