

Histone Modification

RBC Proteins for Epigenetic Research

Reaction Biology Corporation (RBC) has established a program to produce active proteins for epigenetic drug discovery research, now housed in dedicated laboratory space near the RBC assay services facility in Malvern, PA. In addition to a large and expanding line of active recombinant histone and DNA methyltransferases (HMTs & DNMTs), many exclusive to RBC, RBC protein products now include nucleosomes, essential substrates for assay of many epigenetic modifiers.

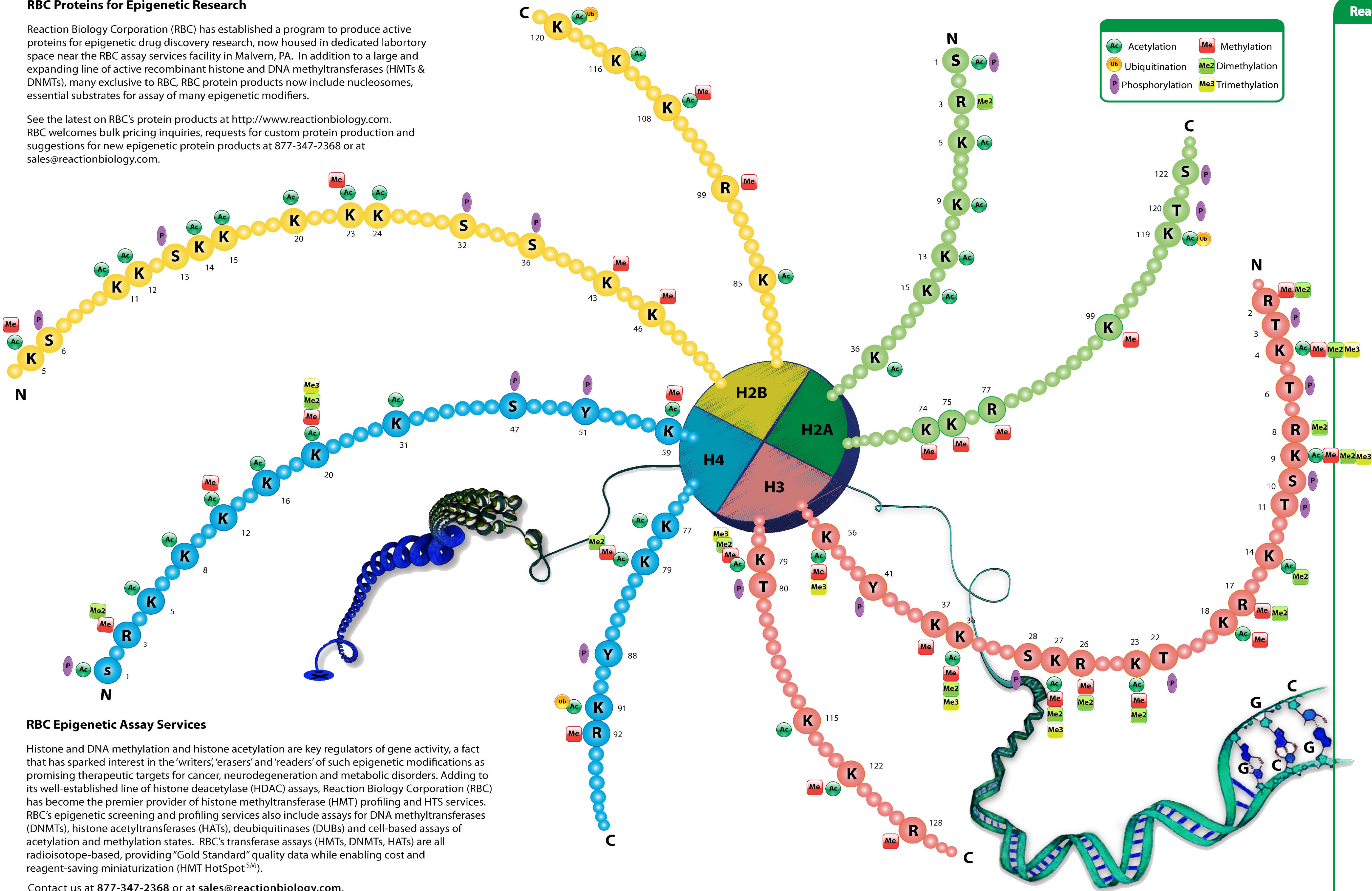
See the latest on RBC's protein products at <http://www.reactionbiology.com>. RBC welcomes bulk pricing inquiries, requests for custom protein production and suggestions for new epigenetic protein products at 877-347-2368 or at sales@reactionbiology.com.

RBC Epigenetic Assay Services

Histone and DNA methylation and histone acetylation are key regulators of gene activity, a fact that has sparked interest in the 'writers', 'erasers' and 'readers' of such epigenetic modifications as promising therapeutic targets for cancer, neurodegeneration and metabolic disorders. Adding to its well-established line of histone deacetylase (HDAC) assays, Reaction Biology Corporation (RBC) has become the premier provider of histone methyltransferase (HMT) profiling and HTS services. RBC's epigenetic screening and profiling services also include assays for DNA methyltransferases (DNMTs), histone acetyltransferases (HATs), deubiquitinases (DUBs) and cell-based assays of acetylation and methylation states. RBC's transferase assays (HMTs, DNMTs, HATs) are all radioisotope-based, providing "Gold Standard" quality data while enabling cost and reagent-saving miniaturization (HMT HotSpotSM).

Contact us at 877-347-2368 or at sales@reactionbiology.com.

Visit <http://www.reactionbiology.com/> for information on established assays.



Reaction Biology Epigenetic Assay Services

RBC Assay Services
RBC Proteins Available
Both Assay Services & Proteins Available

DNA Methyltransferases (DNMTs)

DNMT1
DNMT3a
DNMT3b
DNMT3b/3L Complex

Histone (Protein) Methyltransferases (HMTs)

Ash1L Dot1L EZH1 Complex EZH2 Complex EZH2-Y641F Complex G9a GLP G9a-GLP Complex MLL1 Complex MLL2 Complex MLL3 Complex MLL4 Complex MLL5 Complex NSD1 NSD2 NSD2 (His) NSD2-E1099K NSD2-T1150A NSD3	PRDM8 PRDM9 PRMT1 PRMT3 PRMT4 PRMT5/MEP50 Complex PRMT6 PRMT8 SET1A Complex SET1B Complex SET7/9 SET8 SETD2 (GST) SETD2 (His) SETMAR SMYD2 SUV39H1 SUV39H2 SUV420H1-tv1 SUV420H2-tv2 WRAD2 Complex
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Substrates

GST-GAR
Histone H2A
Histone H2B
Histone H3.3
Nucleosomes (HeLa Mono/Di)
Nucleosomes (HeLa Oligo)
Nucleosomes (HeLa Oligo, Biotinylated)

Histone Deacetylases (HDACs)

HDAC1 HDAC2 HDAC3 HDAC4 HDAC5 HDAC6 HDAC7 HDAC8	HDAC9 HDAC10 HDAC11 Nuclear Extract SIRT1 SIRT2 SIRT3 SIRT5
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Histone Acetyltransferases (HATs)

P300
CBP
KAT5
MYST2
MYST4
pCAF

Reader Domains

ASH1L-[BRD] ATAD2 ATAD2B BAZ1A BAZ1B BAZ2A BAZ2B BPTF-[BRD] BRD1 BRD2-1 BRD2-2 BRD2 Tandem BRD3-1 BRD3-2 BRD3 Tandem BRD4 Full Length BRD4-1 BRD4-2 BRD4 Tandem BRD7 BRD9 BRDT-1	BRDT-2 BRDT-Tandem BRPF1a BRPF1b BRPF3 BRWD1-2 CECR2 CREBBP EP300 HP1β HP1β-[CHR] KAT2A KAT2B L3MBTL1 PB1-1 PB1-2 PB1-3 PB1-4 PB1-5 PB1-6 PHIP-2 PHIP-Tandem	SMARCA2a SMARCA2b SMARCA4 SP100 SP100c SP140 SP140L TAF1-1 TAF1-2 TAF1L-1 TAF1L-2 TAF1L-Tandem TRIM24 TRIM28 TRIM33a (His) TRIM33b TRIM66 UHRF1- [PHD] UHRF1-[SRA] UHRF1-[TDR] UHRF1-[TDR-PHD] UHRF1-FL
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Demethylases

LSD1

Deubiquitinases (DUBs)

A20
Ataxin3
BAP1
NEDP1
SEN1
UCHL1
UCHL3
USP10
USP14
USP2
USP5
USP8

Cellular Assays

H3K27me3
H3K4me2
H3K79me2
H3K36me2
H3K9me2
H3K27me2
Histone Acetylation
Tubulin Acetylation

Other

OGT () O-GlcNAc Transferease