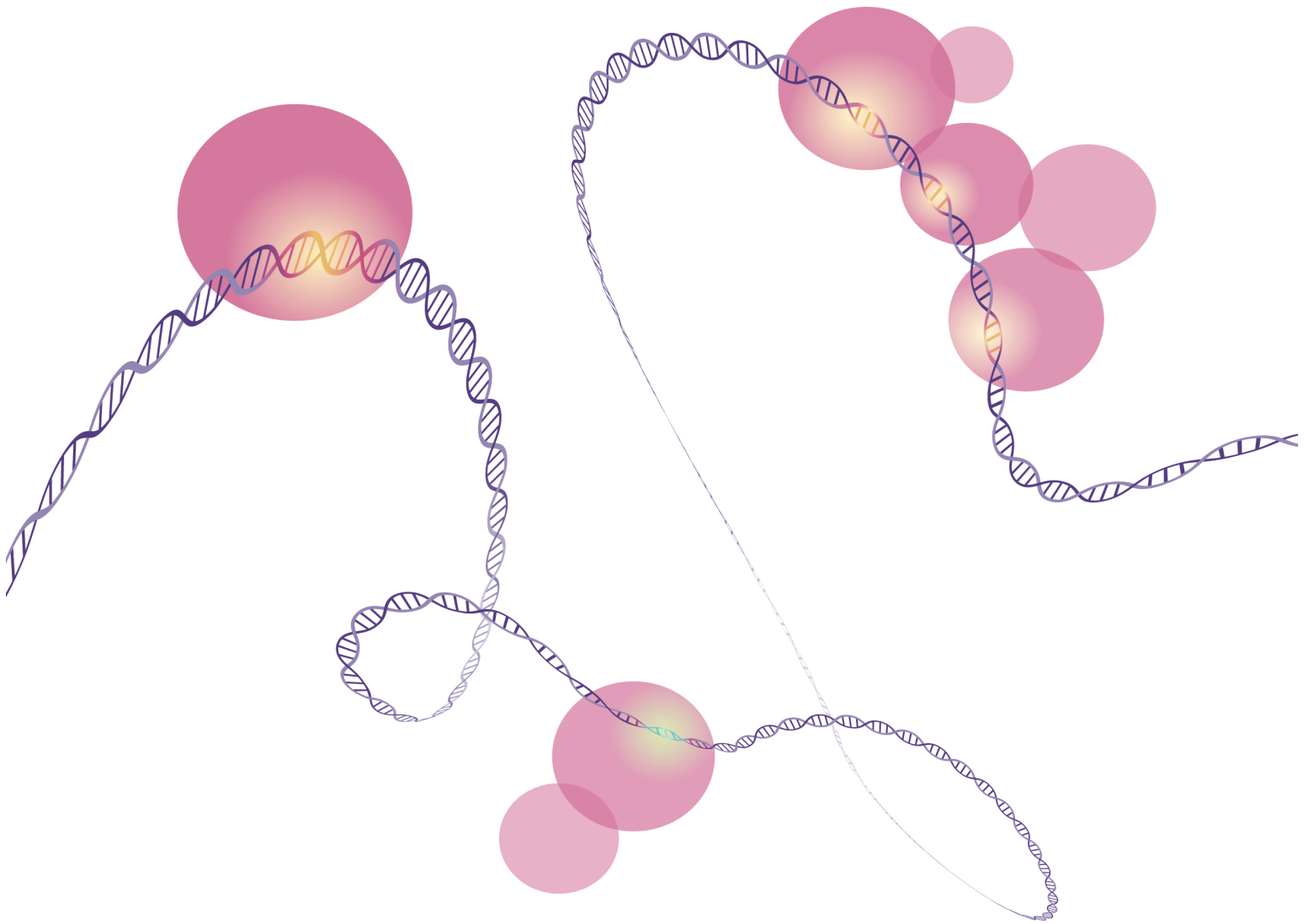


Products and Services to Study **DNA Methylation**



Products and Services to Study DNA Methylation

DNA methylation (5-mC) and methylation variants like 5-hmC contribute to mechanisms responsible for regulating gene expression and many other biological processes. These epigenetic modifications have also become important biomarkers for cancer, aging, neurological disorders, and many other human diseases.

Active Motif is proud to be the leading provider of products and services to study DNA methylation. Our comprehensive product line can support you whether you need just antibodies or recombinant proteins to do assays yourself or end-to-end epigenetic services in which our experts perform the assays, NGS, and bioinformatics for you.



We worked with Active Motif to process some FFPE and frozen liver samples sourced from 25-year-old samples for an RRBS assay. The overall process of submitting samples, communicating with Active Motif, receiving the data, and obtaining the summary was quick and painless. The data itself gave us confidence in using FFPE-sourced samples to assess DNA methylation using the RRBS method.



Brain Chorley, Ph.D.
Research Scientist
US Environmental Protection Agency (EPA)

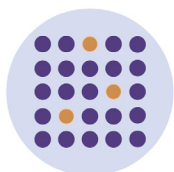


Genome-Wide and Gene-Specific Analysis of DNA Methylation

The goal of many DNA methylation experiments is to identify the methylation status at specific genes or genomic regions in different samples, either at genome-wide or gene-specific scales.

Products & Services for Genome-Wide & Gene-Specific Analysis

Product/Service	Format	Catalog Number
MeDIP Kit	10 rxns	55009
MethylCollector™ Ultra Kit	30 rxns	55005
hMeDIP Kit	10 rxns	55010
Bisulfite Sequencing Service: Targeted Next-Gen	Custom-Contact Us	25035
Reduced Representation Bisulfite Sequencing (RRBS)	Custom-Contact Us	25069
MethylPath™ MeDIP-Seq Service	Custom-Contact Us	25025
MethylPath™ hMeDIP-Seq Service	Custom-Contact Us	25052



Global Analysis of DNA Methylation

Global ELISA-based DNA methylation assays are used to investigate the overall levels of 5-mC or 5-hmC in samples to determine whether treatment conditions or disease phenotypes change epigenetic profiles. Clinical researchers use these high-throughput assays when screening large numbers of patient samples from their study cohorts.

Products Available to Study Global DNA Methylation Levels

Product	Format	Catalog Number
Global DNA Methylation Assay-LINE-1	1 x 96 rxns	55017
Global 5-hmC Quantification Kit	1 x 96 rxns	55018



Single-Nucleotide Resolution Analysis of DNA Methylation

When researchers need to know precisely which cytosine residues are methylated, as well as the overall levels of methylation, at the region(s) of interest, a DNA methylation assay with single-nucleotide resolution is required. The gold standard methods for investigating DNA methylation at single-nucleotide resolution involve performing bisulfite conversion.

Products & Services for Single-Nucleotide Resolution 5-mC Analysis

Product/Service	Format	Catalog Number
Bisulfite Conversion Kit	50 rxns	55016
FFPE Bisulfite Conversion Kit	40 rxns	55021
Reduced Representation Bisulfite Sequencing (RRBS)	Custom-Contact Us	25069
Bisulfite Sequencing Service: Targeted Next-Gen	Custom-Contact Us	25035



DNA Methylation Antibodies

The best DNA methylation assays start with the best antibodies, and Active Motif offers the highest quality and most complete line of antibodies available to study DNA methylation.

Antibodies to Study DNA Methylation

Target	Validated Applications	Formats	Catalog Number
5-Methylcytosine (5-mC) antibody (mAb)	DB, IF, MeDIP	100 µg/10 µg	61479/61480
5-Methylcytosine (5-mC) antibody (pAb)	ChIP, DB, IHC, MeDIP	100 µg/10 µg	61255/61256
AbFlex® 5-Methylcytosine antibody (rAb)	DB	100 µg/10 µg	91187/91188
5-Hydroxymethylcytosine (5-hmC) antibody (mAb)	DB, ICC, IF, IHC, MeDIP	100 µg/50 µg/10µg	39999/40900/40000
5-Hydroxymethylcytosine (5-hmC) antibody (pAb)	DB, IF, IHC, MeDIP	100 µg/50 µg/10 µg	39791/39092/39792
DNMT1 antibody (mAb)	ChIP, IHC, IP, WB	100 µg	39204
DNMT1 antibody (pAb)	IF, IP, WB	10 µg	39905/39906

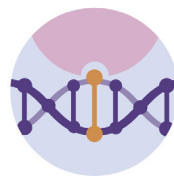


DNA Methylation Enzymes

High-quality recombinant enzymes help improve development and optimization of biochemical assays, including high-throughput drug discovery screens.

Recombinant Enzymes

Enzyme	Format	Catalog Number
Recombinant TET1 (1418-2136) protein	20 µg	31417
Recombinant DNMT1 protein	20 µg/1 mg	31404/31800
Recombinant DNMT3A protein	20 µg/1 mg	31406/31802
Recombinant DNMT3A (278-432) protein	100 µg/1 mg	31541/31941
Recombinant DNMT3A / DNMT3L complex	20 µg/1 mg	31415/31815
Recombinant DNMT3B protein	20 µg/1 mg	31413/31813
Recombinant DNMT3B (212-358) protein	100 µg/1 mg	31542/31942
Recombinant DNMT3B / DNMT3L complex	20 µg/1 mg	31416/31816
Recombinant DNMT3L protein	20 µg/1 mg	31414/31814



DNA Methylation Assays

DNA methyltransferase (DNMT) enzymes are dysregulated in many cancers and other human diseases, making them attractive drug development targets. This assay allows studying DNMT activity in a high-throughput manner.

DNA Methylation Activity Assay

Product	Format	Catalog Number
DNMT Activity/Inhibition Assay	1 x 96 rxns	55006



DNA Methylation Accessory Products and Controls

Successful DNA methylation assays that can be reliably interpreted require using high-quality sample preparation methods and robust controls you can trust.

Sample Preparation & Control Products

Enzyme	Format	Catalog Number
Cell-Free DNA (cfDNA) Purification Kit	100 ml/250 ml	25503/25504
Methylated DNA Standard Kit	3 x 2.5 µg	55008
Fully Methylated Jurkat DNA	10 µg	55003
5-Carboxylcytosine DNA Standard Kit	0.5 µg	55014