

Methylation Specific Bisulfite-Seq (MSBS)

Enrichment of methylated CpG sites

Methylation Specific Bisulfite-Seq Library Prep Kit

Advantages

- Enrichment of methylated CpG
- Single base resolution
- Low cost for sequencing

Simple Workflow

- Two reaction steps for library preparation
- Simplified beads purification

Save Your Time

Total time: 1.5 hours

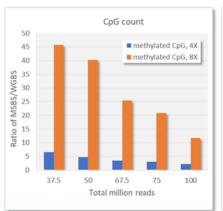
Hands-on time: ~10 minutes

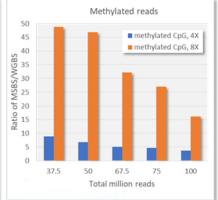
Simple workflow Two reaction steps dsDNA Adaptor Pre-PCR Post-PCR PCR synthesis addition purification purification 3 min 1 min 1 min 2 min 2 min Hands-on time Walk-away time 20 min 6 min 10-20 min 7 min Easy High-quality & Low cost No DNA shearing needed No library loss by bisulfite conversion Total time: ~1.5 hrs Hands-on time: ~10 min No expensive methylated adaptor

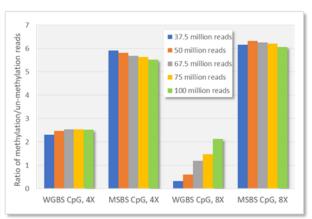
Comparison of NGS technologies for Epigenetics

	MSBS (BioDynami)	WGBS	RRBS	MeDIP-Seq
Technology	methylation specific bisulfite sequencing	whole genome bisulfite sequencing	reduced representation bisulfite sequencing	methylated DNA immunoprecipitation sequencing
Feature	enrichment of methylated CpG sites	whole genome is sequenced including non-methylated regions	DNA fragments from restirction enzyme digestion is used	antibody based methylated cytosine capture
Bisulfite sequencing	yes	yes	yes	no
Single base resolution	yes	yes	yes	no (150-200 bases)
Low cost	yes	no	yes	yes
Whole methylated CpG coverage	yes	yes	no (only 10%)	yes

Enrichment of methylated CpG sites with MSBS technology





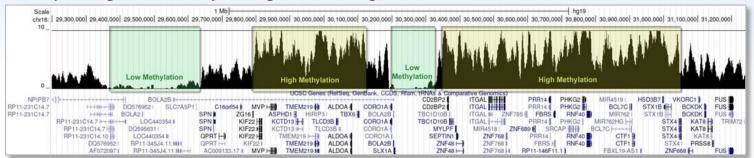




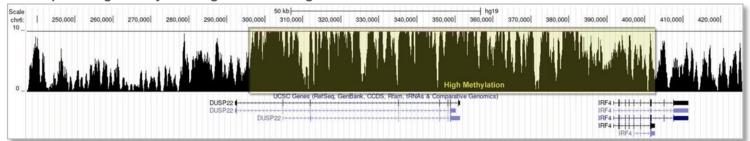
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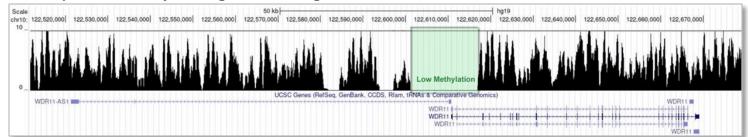
Example 1: High and low methylated regions in human genome



Example 2: High methylated region in human genome



Example 3: Low methylated region in human genome



Kit List

Product Name	Cat.#
Methylation Specific Bisulfite-Seq Library Prep Kit (illumina platform, with non-index primers & PCR reagent)	30101
Methylation Specific Bisulfite-Seq Library Prep Kit (illumina platform, with index primers & PCR reagent)	30102
Methylation Specific Bisulfite-Seq Library Prep Kit (illumina platform, with unique dual index primers & PCR reagent)	30103

