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MethylC-Seq

National Cancer Institute

Source

National Cancer Institute. *MethylC-Seq*. NCI Thesaurus. Code C106055.

A DNA sequencing technique that can differentiate cytosine from 5-methylcytosine in a DNA sample. It combines bisulfite treatment with next generation sequencing techniques. First, a genomic DNA sample is amplified using adaptor oligonucleotides in which every cytosine is methylated. Then, the amplified DNA is treated with bisulfite twice under denaturing conditions, which converts non-methylated cytosine residues to uracil. The bisulfite-treated sample is subjected to another round of amplification and subsequently analyzed by shotgun sequencing.