
5-MethylCytosine / BSA

Catalog Number: bs-9450PB

Storage: 0.01M PBS(pH7.4).

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: Cytidine is a nucleoside formed by a cytosine attached to a ribose ring via a beta-N1-glycosidic bond. DNA is methylated on cytidines by DNA methylases (DNMTs) to generate 5-methylcytidine (5-mC), a potent epigenetics marker and regulator of gene expression. The reverse reaction (cytidine demethylation) starts with its oxidation to hydroxymethyl- (5-hmC), formyl- (5-fC), and carboxy- (5-caC) cytidine. Several enzymes, including the Tet family of proteins have been implicated in cytidine demethylation.