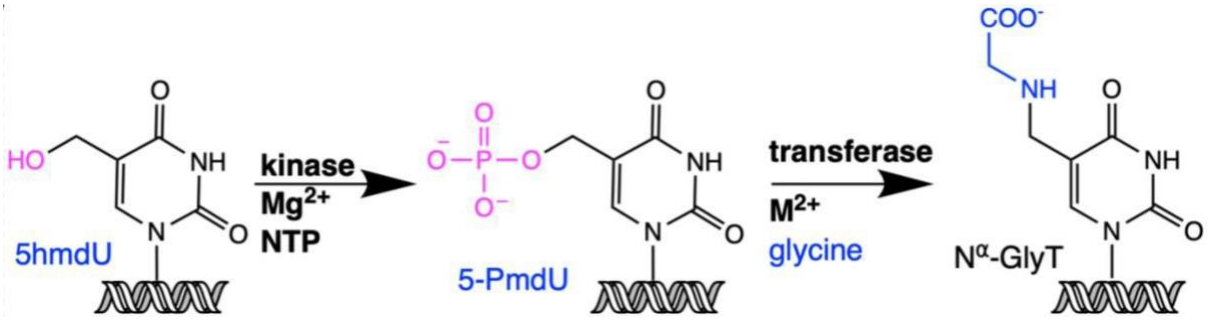
5hmdU hypermodification within double-stranded DNA: activation and group transfer



This diagram denotes the pathway of converting 5-hmdU within DNA to the product N-alpha-GlyT. First, a kinase phosphorylates the 5-hydroxymethyl group of 5hmdU in a magnesium-dependent reaction. Second, a transferase displaces the phosphoryl group with the amino acid glycine in a divalent metal ion dependent reaction..