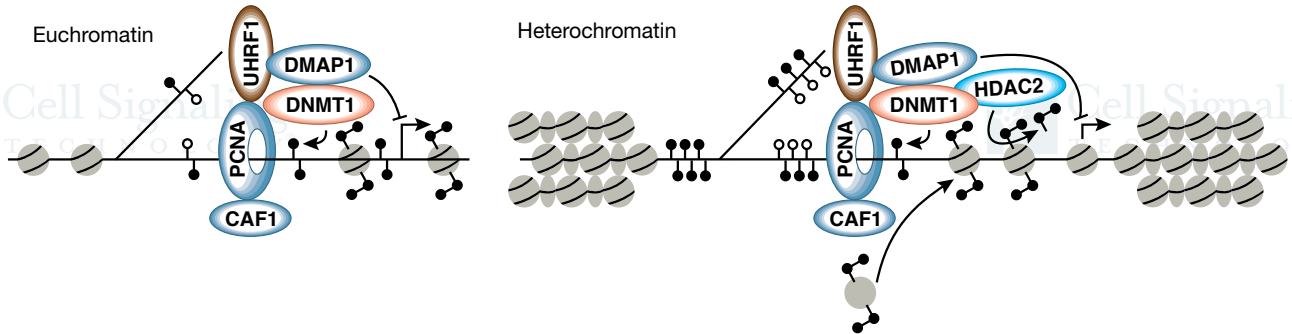
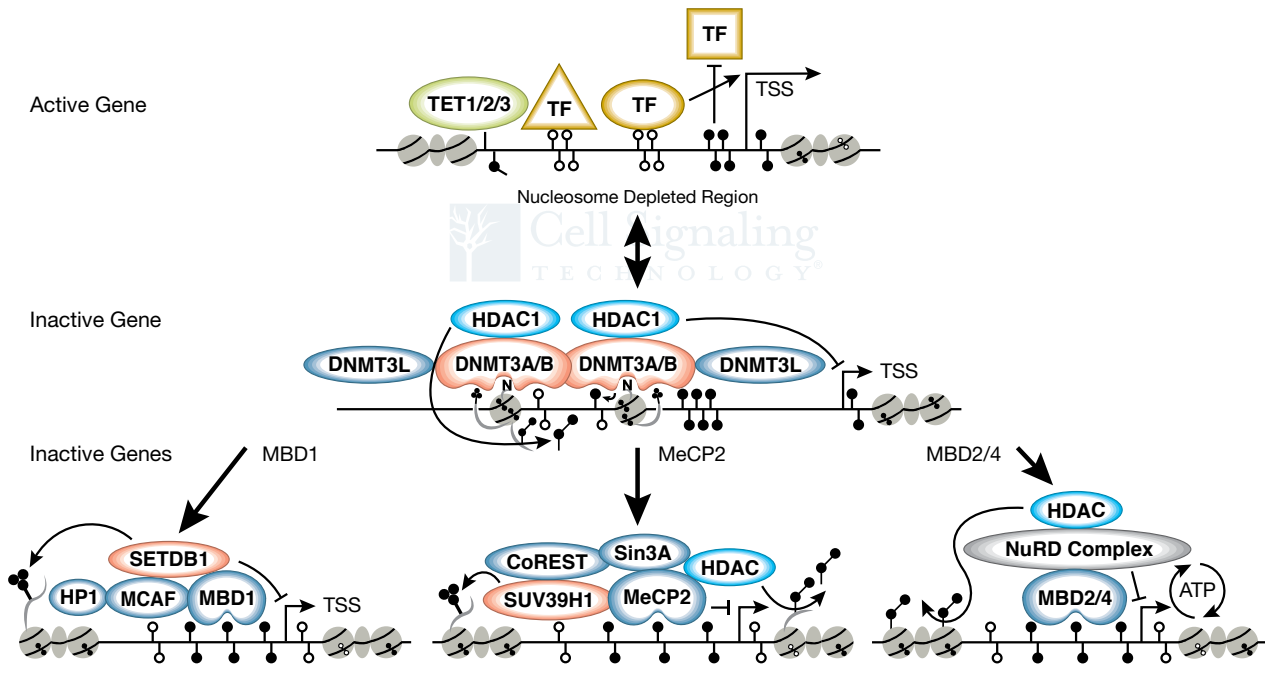




# Maintenance Methylation During DNA Replication

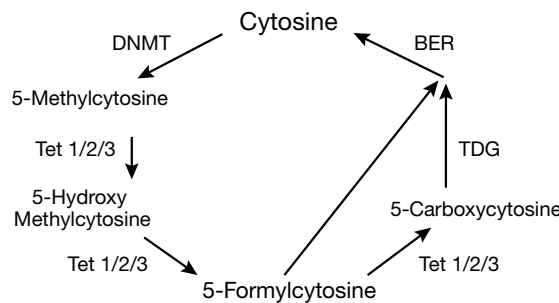


## De novo Cytosine Methylation



## Tet-Mediated Cytosine Demethylation

- Key**
- ♀ — Cytosine
  - ♂ — Methylcytosine
  - ♂ — 5-Hydroxy Methylcytosine
  - ♂ — H3K9me3
  - N — H3K4me0
  - ♂ — H3K36me3
  - ♂ — H3K27 Acetyl



## Pathway Diagram Key

- |           |                                |   |                |                                |                 |  |          |
|-----------|--------------------------------|---|----------------|--------------------------------|-----------------|--|----------|
| Acetylase | Apoptosis/ Autophagy Regulator | Deacetylase or Cytoskeletal Protein         | GTPase/GAP/GEF | Metabolic Enzyme               | Phosphatase     | Ubiquitin/SUMO Ligase or Deubiquitinase    | Receptor |
| Adaptor   | Cell Cycle Regulator           | Growth Factor/Cytokine/ Development Protein | Kinase         | Methyltransferase or G-protein | Protein Complex | Transcription Factor or Translation Factor | Other    |
- Direct Process   
 Tentative Process   
 Translocation Process   
 Inhibitory Modification   
 Stimulatory Modification   
 Transcriptional Modification