

CpG ISLAND PROMOTER

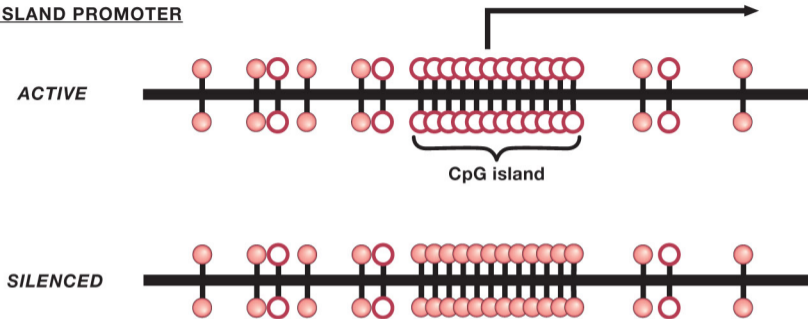


Figure 4. CpG Islands

CpG islands are regions of high CpG density that lack CpG methylation found at promoters of most human genes. Long-term silencing of the gene can be ensured by methylation of the CpG island region. For example, genes on the inactive X chromosome and certain imprinted genes are silenced in this way. Additionally, in cancer cells, certain genes are aberrantly silenced by CpG island methylation.