HCP

- Active promoters of self-renewal genes
- Active promoters of housekeeping genes

HCP

- "Poised" promoters of developmental regulators and differentiation genes

ICP

- Silent promoters of early development genes
- Silent promoters of differentiation genes

ICP

- Active promoters of metabolic processes
- Active promoters of transcription regulation

LCP

- Silent promoters of developmental genes

Differentiation

- Active promoters of housekeeping genes
- Silent promoters of pluripotency genes
- Active promoters of metabolic processes
- Active promoters of transcription regulation
- Active promoters of lineage specific genes
- Silent promoters of non-lineage specific genes

Reprogramming

- Unmethylated CpG
- Methylated CpG
- Trimethylated histone H3 at lysine 4
- Trimethylated histone H3 at lysine 27

SELF-RENEWAL

STEM CELL/IPS

neuron

OR

Epithelial cell

OR

ICP/LCP

Silent promoters of non-lineage specific genes

HCP

Silent promoters of developmental genes

ICP

Active promoters of metabolic processes

LCP

Silent promoters of developmental genes

ICP/LCP

Active promoters of lineage specific genes

HCP

Active promoters of self-renewal genes

HCP

Active promoters of housekeeping genes

ICP

Active promoters of transcription regulation

LCP

Silent promoters of developmental genes

ICP/LCP

Active promoters of lineage specific genes

HCP

Active promoters of housekeeping genes