

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Clinical information and the relative marker quantification of Opal tissue array

File Name: Supplementary Data 2

Description: Single cell RNA-seq related gene list and expression level for Figure 3A, 3C, 3D, 3F,3G and 4E

File Name: Supplementary Data 3

Description: CHIP-seq related gene list