

Table S2. The copy number of each escape gene in four patients

| Region | Analysis | Escape gene | Patient 1 | Patient 2 | Patient 3 | Patient 4 |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------|
| PAR1 | RRBS | <i>PLCXD1</i> | duplication | normal copy number | normal copy number | deletion |
| | | <i>PPP2R3B</i> | duplication | normal copy number | normal copy number | deletion |
| | | <i>SHOX</i> | duplication | normal copy number | normal copy number | deletion |
| | | <i>SLC25A6</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>ASMTL</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>AKAP17A</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>CD99P1</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>CD99</i> | duplication | normal copy number | normal copy number | duplication |
| X-specific region | EPIC | <i>ARSD</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>MXRA5</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>PRKX</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>NLGN4X</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>PNPLA4</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>KAL1</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>TCEANC</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>RAB9A</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>TRAPPC2</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>GPM6B</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>GEMIN8</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>CA5BP1</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>CA5B</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>ZRAR2</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>AP1S2</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>CTPS2</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>SYAP1</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>TXLNG</i> | duplication | normal copy number | normal copy number | duplication |
| | | <i>EIF1AX</i> | normal copy number | duplication | normal copy number | duplication |
| | | <i>EIF2S3</i> | normal copy number | duplication | normal copy number | duplication |
| <i>ZFX</i> | normal copy number | duplication | normal copy number | duplication | | |
| <i>CXorf38</i> | deletion | normal copy number | duplication | normal copy number | | |
| <i>DDX3X</i> | deletion | normal copy number | duplication | normal copy number | | |

| | | | | |
|---------------|--------------------|--------------------|--------------------|--------------------|
| <i>FUNDC1</i> | deletion | normal copy number | duplication | normal copy number |
| <i>KDM6A</i> | deletion | normal copy number | duplication | normal copy number |
| <i>UBA1</i> | normal copy number | normal copy number | duplication | normal copy number |
| <i>CDK16</i> | normal copy number | normal copy number | duplication | normal copy number |
| <i>KDM5C</i> | normal copy number | normal copy number | duplication | normal copy number |
| <i>IQSEC2</i> | normal copy number | normal copy number | duplication | normal copy number |
| <i>RPS4X</i> | normal copy number | normal copy number | normal copy number | normal copy number |
| <i>JPX</i> | normal copy number | normal copy number | normal copy number | normal copy number |
| <i>LICAM</i> | deletion | normal copy number | normal copy number | normal copy number |

PAR1, pseudoautosomal region 1; RRBS, Reduced Representation Bisulfite Sequencing

The three genes which showed abnormal methylation in Patient 1 are boldfaced.