**Supplementary** **Table 1.** Antibodies used for the immunohistochemical analysis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Antibody** | **Provider** | **Clone** | **Type** | **Dilution** | **Location** | **Immuno-stainer** |
| MLH1 | Biocare | PA0610 | Monoclonal mouse | RTU | Nuclear | 1 |
| MSH2 | Calbiochem | FE-11 | Monoclonal mouse | 1:100 | Nuclear | 1 |
| MSH6 | Biocare | PM265AA | Monoclonal chimpanzee | RTU | Nuclear | 1 |
| PMS2 | Biocare | PM344AA | Monoclonal mouse | RTU | Nuclear | 1 |
| HTR2B | Sigma-Aldrich | HPA012867 | Polyclonal rabbit | 1:50 | Cytoplasmic | 2 |
| FRMD6 | Sigma-Aldrich | HPA001297 | Polyclonal rabbit | 1:50 | Cytoplasmic | 2 |
| ZEB1 | Sigma-Aldrich | HPA027524 | Polyclonal rabbit | 1:50 | Nuclear | 2 |
| CDX2 | Novocastra | PA0535 | Monoclonal mouse | RTU | Nuclear | 1 |
| PD-L1 | Roche | SP142 | Monoclonal mouse | RTU | Membrane | 2 |
| TP53 | Roche | DO-7 | Monoclonal mouse | RTU | Nuclear | 2 |

1: *Vision Leica Biosystems Bond-Max* automatic immunostainer; 2: *BenchMark XT Ventana* automatic inmunostainer (Roche); RTU: ready-to-use.

**Supplementary** **Table 2.** Primers used for bisulfite pyrosequencing.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **Forward (5'--3')** | **Reverse (5'--3')** | **Sequencing (5'--3')** |
| *CDX2* | AGGGAGGAGGTAGGTTAGA | ACAAACCTCACCATACTACCTA | GTTAGAGGGAGGGAT |
| *FRMD6* | TAGTGATTTTATGAATGAGGTGGATGTT | ATATAATTACTACATTACCCCTTCACA | ATAGTAATATTTTTGTAGATAGGT |
| *ZEB1* | TGTTGATTGTTATTGTTTGGATAGTT | AAACAAAAAATCCCACACAAAATC | GTAGTTTAGGTTATATAAGGAAT |

**Supplementary** **Table 3.** Sequences of shRNAs used for ZEB1 silencing.

|  |  |
| --- | --- |
| **Gene** | **Forward (5' - 3')** |
| *sh\_ZEB1\_1\_up* | GATCCGCCCCTCTCTGAAAGAACACATTACTCGAGTAATGTGTTCTTTCAGAGAGGGGTTTTTG |
| *sh\_ZEB1\_1\_down* | AATTCAAAAACCCCTCTCTGAAAGAACACATTACTCGAGTAATGTGTTCTTTCAGAGAGGGGCG |
| *sh\_ZEB1\_2\_up* | GATCCGCCGCTGTTGTTCTGCCAACAGTTCTCGAGAACTGTTGGCAGAACAACAGCGGTTTTTG |
| *sh\_ZEB1\_2\_down* | AATTCAAAAACCGCTGTTGTTCTGCCAACAGTTCTCGAGAACTGTTGGCAGAACAACAGCGGCG |
| *sh\_ZEB1\_3\_up* | GATCCGCCCGGCGCAATAACGTTACAAATCTCGAGATTTGTAACGTTATTGCGCCGGGTTTTTG |
| *sh\_ZEB1\_3\_down* | AATTCAAAAACCCGGCGCAATAACGTTACAAATCTCGAGATTTGTAACGTTATTGCGCCGGGCG |