S2 Table. List of genes appeared three or more gene signatures

|  |  |  |
| --- | --- | --- |
| **Gene name** | **Frequency** | **References** |
| *BIRC5* | 7 | [[1-7](#_ENREF_1)] |
| *MYBL2* | 6 | [[1-3](#_ENREF_1),[5](#_ENREF_5),[8](#_ENREF_8),[9](#_ENREF_9)] |
| *BUB1* | 5 | [[2](#_ENREF_2),[5-8](#_ENREF_5)] |
| *CENPF* | 5 | [[2](#_ENREF_2),[3](#_ENREF_3),[5](#_ENREF_5),[7](#_ENREF_7),[10](#_ENREF_10)] |
| *MAD2L1* | 5 | [[2](#_ENREF_2),[5-8](#_ENREF_5)] |
| *PRC1* | 5 | [[2](#_ENREF_2),[6-8](#_ENREF_6),[10](#_ENREF_10)] |
| *RRM2* | 5 | [[2](#_ENREF_2),[3](#_ENREF_3),[7](#_ENREF_7),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *CCNB1* | 4 | [[1-3](#_ENREF_1),[8](#_ENREF_8)] |
| *CCNB2* | 4 | [[2](#_ENREF_2),[6-8](#_ENREF_6)] |
| *CCNE2* | 4 | [[2](#_ENREF_2),[6](#_ENREF_6),[7](#_ENREF_7),[11](#_ENREF_11)] |
| *CENPA* | 4 | [[2](#_ENREF_2),[6-8](#_ENREF_6)] |
| *H2AFZ* | 4 | [[2](#_ENREF_2),[8-10](#_ENREF_8)] |
| *KPNA2* | 4 | [[2](#_ENREF_2),[6](#_ENREF_6),[8](#_ENREF_8),[11](#_ENREF_11)] |
| *MKI67* | 4 | [[2](#_ENREF_2),[3](#_ENREF_3),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *MLF1IP* | 4 | [[2](#_ENREF_2),[8-10](#_ENREF_8)] |
| *PGK1* | 4 | [[7](#_ENREF_7),[8](#_ENREF_8),[12](#_ENREF_12),[13](#_ENREF_13)] |
| *PTTG1* | 4 | [[2](#_ENREF_2),[3](#_ENREF_3),[5](#_ENREF_5),[8](#_ENREF_8)] |
| *STK6* | 4 | [[2](#_ENREF_2),[5-7](#_ENREF_5)] |
| *TRIP13* | 4 | [[2](#_ENREF_2),[6-8](#_ENREF_6)] |
| *ADM* | 3 | [[7](#_ENREF_7),[13](#_ENREF_13),[14](#_ENREF_14)] |
| *ASPM* | 3 | [[2](#_ENREF_2),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *BCL2* | 3 | [[1](#_ENREF_1),[3](#_ENREF_3),[12](#_ENREF_12)] |
| *BM039* | 3 | [[2](#_ENREF_2),[6](#_ENREF_6),[7](#_ENREF_7)] |
| *BUB1B* | 3 | [[2](#_ENREF_2),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *CCT5* | 3 | [[2](#_ENREF_2),[8](#_ENREF_8),[9](#_ENREF_9)] |
| *CDC2* | 3 | [[2](#_ENREF_2),[5](#_ENREF_5),[8](#_ENREF_8)] |
| *CDC20* | 3 | [[2](#_ENREF_2),[3](#_ENREF_3),[8](#_ENREF_8)] |
| *CDKN3* | 3 | [[2](#_ENREF_2),[5](#_ENREF_5),[8](#_ENREF_8)] |
| *CIRBP* | 3 | [[7](#_ENREF_7),[8](#_ENREF_8),[12](#_ENREF_12)] |
| *CKS2* | 3 | [[5](#_ENREF_5),[7](#_ENREF_7),[8](#_ENREF_8)] |
| *CYBRD1* | 3 | [[4](#_ENREF_4),[8](#_ENREF_8),[9](#_ENREF_9)] |
| *DC13* | 3 | [[2](#_ENREF_2),[6](#_ENREF_6),[7](#_ENREF_7)] |
| *DKFZp762E1312* | 3 | [[2](#_ENREF_2),[7](#_ENREF_7),[8](#_ENREF_8)] |
| *EPHX2* | 3 | [[4](#_ENREF_4),[5](#_ENREF_5),[8](#_ENREF_8)] |
| *ERBB2* | 3 | [[3-5](#_ENREF_3)] |
| *ESR1* | 3 | [[3-5](#_ENREF_3)] |
| *FLJ10156* | 3 | [[2](#_ENREF_2),[6](#_ENREF_6),[7](#_ENREF_7)] |
| *FUT8* | 3 | [[5](#_ENREF_5),[7](#_ENREF_7),[9](#_ENREF_9)] |
| *KIAA0101* | 3 | [[5](#_ENREF_5),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *KIF20A* | 3 | [[2](#_ENREF_2),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *KIF2C* | 3 | [[2](#_ENREF_2),[3](#_ENREF_3),[8](#_ENREF_8)] |
| *MAPT* | 3 | [[3](#_ENREF_3),[4](#_ENREF_4),[12](#_ENREF_12)] |
| *MELK* | 3 | [[2](#_ENREF_2),[3](#_ENREF_3),[8](#_ENREF_8)] |
| *MMP1* | 3 | [[4](#_ENREF_4),[5](#_ENREF_5),[15](#_ENREF_15)] |
| *NUSAP1* | 3 | [[2](#_ENREF_2),[8](#_ENREF_8),[10](#_ENREF_10)] |
| *PFKP* | 3 | [[7](#_ENREF_7),[9](#_ENREF_9),[13](#_ENREF_13)] |
| *PTGER3* | 3 | [[4](#_ENREF_4),[5](#_ENREF_5),[8](#_ENREF_8)] |
| *RACGAP1* | 3 | [[2](#_ENREF_2),[4](#_ENREF_4),[8](#_ENREF_8)] |
| *RAI2* | 3 | [[7](#_ENREF_7),[8](#_ENREF_8),[14](#_ENREF_14)] |
| *SOX4* | 3 | [[5](#_ENREF_5),[13](#_ENREF_13),[15](#_ENREF_15)] |
| *SQLE* | 3 | [[4](#_ENREF_4),[8](#_ENREF_8),[9](#_ENREF_9)] |
| *STC2* | 3 | [[4](#_ENREF_4),[12](#_ENREF_12),[13](#_ENREF_13)] |
| *STK15* | 3 | [[1](#_ENREF_1),[6](#_ENREF_6),[7](#_ENREF_7)] |
| *TOP2A* | 3 | [[4](#_ENREF_4),[5](#_ENREF_5),[10](#_ENREF_10)] |
| *UBE2C* | 3 | [[2-4](#_ENREF_2)] |
| *ZWINT* | 3 | [[2](#_ENREF_2),[6](#_ENREF_6),[8](#_ENREF_8)] |

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