## Supplementary tables

Table S1. The unique proteins for each clone identified by LC-MALDI TOF/TOF mass spectrometry

| MCF7/Zeb1 OS-mC LOW p53+ cells (L-P53WT) | | MCF7/Zeb1 OS-mC HIGH p53+ cells (H-P53WT) | | MCF7/Zeb1 OS-mC LOW shp53 cells (L-shP53) | | MCF7/Zeb1 OS-mC HIGH shp53 cells (H-shP53) | |
|---|---|---|---|---|---|---|---|
| Protein name | NP | Protein name | NP | Protein name | NP | Protein name | NP |
| 60S acidic ribosomal protein P0 **(RPLP0)** | 3 | 40S ribosomal protein SA **(RPSA)** | 3 | 40S ribosomal protein S3 **(RPS3)** | 5 | 40S ribosomal protein S8 **(RPS8)** | 3 |
| Chromodomain-helicase-DNA-binding protein 5 **(CHD5)** | 4 | 60S ribosomal protein L23 **(RPL23)** | 3 | 60S ribosomal protein L4 **(RPL4)** | 4 | Cathepsin D **(CTSD)** | 3 |
| DNA topoisomerase 2-alpha **(TOP2A)** | 6 | 60S ribosomal protein L35 **(RPL35)** | 3 | 60S ribosomal protein L7a **(RPL7A)** | 4 | Chromodomain-helicase-DNA-binding protein 4 **(CHD4)** | 9 |
| Dynein light chain 1, cytoplasmic **(DYNLL1)** | 3 | Acetyl-CoA acetyltransferase, mitochondrial **(ACAT1)** | 9 | Apoptotic chromatin condensation inducer in the nucleus **(ACIN1)** | 7 | Crk-like protein **(CRKL)** | 3 |
| Histone deacetylase 1 **(HDAC1)** | 5 | Annexin A2 **(ANXA2)** | 9 | Calcium homeostasis endoplasmic reticulum protein **(CHERP)** | 4 | Metastasis-associated protein MTA1 **(MTA1)** | 4 |
| Histone H2B type 2-F **(HIST2H2BF)** | 3 | Double-strand break repair protein MRE11 **(MRE11)** | 4 | Far upstream element-binding protein 3 **(FUBP3)** | 8 | Metastasis-associated protein MTA2 **(MTA2)** | 4 |
| Mitotic checkpoint protein BUB3 **(BUB3)** | 3 | E3 ubiquitin/ISG15 ligase TRIM25 **(TRIM25)** | 3 | Formin-binding protein 4 **(FNBP4)** | 3 | Poly(rC)-binding protein 2 **(PCBP2)** | 3 |
| Nuclear cap-binding protein subunit 1 **(NCBP1)** | 3 | F-actin-capping protein subunit alpha-1 **(CAPZA1)** | 4 | Heterochromatin protein 1-binding protein 3 **(HP1BP3)** | 3 | REST corepressor 1 **(RCOR1)** | 3 |
| Peroxiredoxin-4 **(PRDX4)** | 4 | Heat shock protein beta-1 **(HSPB1)** | 3 | Histone H2A type 1-C **(HIST1H2AC)** | 3 | Zinc finger protein 516 **(ZNF516)** | 3 |
| Probable global transcription activator SNF2L2 **(SMARCA2)** | 5 | Heterogeneous nuclear ribonucleoproteins A2/B1 **(HNRNPA2B1)** | 3 | Myelin expression factor 2 **(MYEF2)** | 6 | | |
| Protein transport protein Sec23B **(SEC23B)** | 4 | Heterogeneous nuclear ribonucleoprotein L-like **(HNRNPLL)** | 3 | Non-POU domain-containing octamer-binding protein **(NONO)** | 4 | | |
| RNA-binding protein 4 **(RBM4)** | 3 | Heterogeneous nuclear ribonucleoprotein R **(HNRNPR)** | 5 | Pre-mRNA-processing factor 19 **(PRPF19)** | 8 | | |
| Stromal membrane-associated protein 1 **(SMAP1)** | 4 | Histone H1.3 **(HIST1H1D)** | 8 | Probable ATP-dependent RNA helicase DDX52 **(DDX52)** | 3 | | |
| SWI/SNF complex subunit SMARCC1 **(SMARCC1)** | 4 | Histone H1x **(H1FX)** | 4 | Regulation of nuclear pre-mRNA domain-containing protein 2 **(RPRD2)** | 6 | | |
| | | Histone H3.1 **(HIST1H3J)** | 3 | RNA-binding protein 14 **(RBM14)** | 8 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Importin subunit alpha-1 **(KPNA2)** | 3 | Spermatid perinuclear RNA-binding protein **(STRBP)** | 4 | | |
| | | Polypyrimidine tract-binding protein 3 **(PTBP3)** | 4 | | | | |
| | | Pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15 **(DHX15)** | 3 | | | | |
| | | Probable peptidyl-tRNA hydrolase **(PTRH1)** | 4 | | | | |
| | | Protein DEK **(DEK)** | 3 | | | | |
| | | Protein S100-A8 **(S100A8)** | 3 | | | | |
| | | Replication factor C subunit 3 **(RFC3)** | 3 | | | | |
| | | RuvB-like 1 **(RUVBL1)** | 2 | | | | |
| | | Suprabasin **(SBSN)** | 3 | | | | |
| | | Transcription activator BRG1 **(SMARCA4)** | 4 | | | | |
| | | WD40 repeat-containing protein SMU1 **(SMU1)** | 4 | | | | |
| | | Zinc finger protein 217 (**ZNF217)** | 2 | | | | |
| | | Zinc fingers and homeoboxes protein 2 (**ZHX2)** | 4 | | | | |

Table S2. Non-specifically bound proteins (at least nine biological repeats for each column)

| Protein name | Number of peptides | |
|---|---|---|
| | p53+cells | shp53 cells |
| 3-hydroxyacyl-CoA dehydrogenase type-2 (**HSD17B10**) | **7** | **0** |
| 40S ribosomal protein S20 **(RPS20)** | **5** | **0** |
| 60S ribosomal protein L23 **(RPL23)** | **0** | **5** |
| Actin, cytoplasmic 1 **(ACTB)** | **9** | **0** |
| Actin, cytoplasmic 2 **(ACTG1)** | **0** | **7** |
| Aspartyl aminopeptidase **(DNPEP)** | **5** | **0** |
| ATP-dependent RNA helicase A **(DHX9)** | **8** | **15** |
| ATP-dependent RNA helicase DDX3X **(DDX3X)** | **9** | **11** |
| DNA topoisomerase 1 **(TOP1)** | **7** | **17** |
| DNA topoisomerase 2-beta **(TOP2B)** | **11** | **0** |
| DNA-3-methyladenine glycosylase **(MPG)** | **6** | **10** |
| DNA-dependent protein kinase catalytic subunit **(PRKDC)** | **35** | **48** |
| Double-stranded RNA-specific adenosine deaminase **(ADAR)** | **9** | **16** |
| Elongation factor 1-alpha 1 **(EEF1A1)** | **0** | **14** |
| Far upstream element-binding protein 2 **(KHSRP)** | **14** | **15** |
| Far upstream element-binding protein 3 **(FUBP3)** | **7** | **0** |

| | | |
|---|---|---|
| General transcription factor II-I **(GTF2I)** | **8** | **12** |
| Heat shock 70 kDa protein 1A **(HSPA1A)** | **7** | **0** |
| Heat shock cognate 71 kDa protein **(HSPA8)** | **11** | **19** |
| Heterogeneous nuclear ribonucleoprotein H **(HNRNPH1)** | **8** | **16** |
| Heterogeneous nuclear ribonucleoprotein K **(HNRNPK)** | **14** | **13** |
| Heterogeneous nuclear ribonucleoprotein L **(HNRNPL)** | **0** | **12** |
| Heterogeneous nuclear ribonucleoprotein M **(HNRNPM)** | **13** | **29** |
| Histone H1.2 **(HIST1H1C)** | **7** | **0** |
| Histone H4 **(HIST4H4)** | **5** | **0** |
| Kinesin-like protein KIF22 **(KIF22)** | **6** | **0** |
| Lamina-associated polypeptide 2, isoform alpha **(TMPO)** | **8** | **0** |
| Matrin-3 **(MATR3)** | **15** | **18** |
| Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial **(MCCC2)** | **11** | **0** |
| Nuclear mitotic apparatus protein 1 **(NUMA1)** | **45** | **69** |
| Nucleophosmin **(NPM1)** | **0** | **10** |
| Peptidyl-prolyl cis-trans isomerase A **(PPIA)** | **0** | **9** |
| Peroxiredoxin-1 **(PRDX1)** | **13** | **16** |
| Poly [ADP-ribose] polymerase 1 **(PARP1)** | **7** | **0** |
| Polypyrimidine tract-binding protein 1 **(PTBP1)** | **9** | **11** |
| Probable ATP-dependent RNA helicase DDX17 **(DDX17)** | **24** | **18** |
| Probable ATP-dependent RNA helicase DDX5 **(DDX5)** | **31** | **29** |
| Protein disulfide-isomerase A3 **(PDIA3)** | **8** | **0** |
| Protein disulfide-isomerase A6 **(PDIA6)** | **16** | **11** |
| Protein disulfide-isomerase **(P4HB)** | **8** | **0** |
| Protein RCC2 **(RCC2)** | **15** | **21** |
| Putative elongation factor 1-alpha-like 3 **(EEF1A1P5)** | **8** | **0** |
| RNA-binding protein 25 **(RBM25)** | **0** | **11** |
| Serine/arginine repetitive matrix protein 2 **(SRRM2)** | **17** | **17** |
| Splicing factor, proline- and glutamine-rich **(SFPQ)** | **5** | **7** |
| Stress-70 protein, mitochondrial **(HSPA9)** | **8** | **9** |
| Thioredoxin domain-containing protein 5 **(TXNDC5)** | **7** | **0** |
| TAR DNA-binding protein 43 **(TARDBP)** | **0** | **5** |
| Tubulin alpha-1B chain **(TUBA1B)** | **0** | **16** |
| Tubulin beta-4B chain **(TUBB4B)** | **5** | **20** |
| Tudor-interacting repair regulator protein **(NUDT16L1)** | **6** | **8** |
| X-ray repair cross-complementing protein 6 **(XRCC6)** | **5** | **14** |