

Gene deletion strains identified in this study that grew poorly under anoxic conditions

Average colony size reduction under anoxic condition (3 replicates). The values are shown in percentage. Darker colour represents higher sensitivity.

AAC1	YMR056C	51.73
ADH1	YOL086C	33.18
ADK2	YER170W	20.46
ALK1	YGL021W	72.70
APA1	YCL050C	27.04
APS2	YJR058C	39.53
APS3	YJL024C	42.42
ASF2	YDL197C	37.48
ATX1	YNL259C	20.60
AZF1	YOR113W	23.08
BIO3	YNR058W	44.04
BUD3	YCL014W	40.73
CAF120	YNL278W	32.89
CDC26	YFR036W	60.70
CIN4	YMR138W	38.68
CLA4	YNL298W	26.04
CNM67	YNL225C	24.91
COD3	YGL223C	82.58
COS10	YNR075W	19.48
COX5A	YNL052W	39.71
COX7	YMR256C	34.81
CPA1	YOR303W	20.60
CSM2	YIL132C	25.62
CSR1	YLR380W	22.58
CSR2	YPR030W	38.18
CST9	YLR394W	19.88
CTF18	YMR078C	50.54
CTS1	YLR286C	23.15
CYC2	YOR037W	38.03
CYC7	YEL039C	25.67
CYK3	YDL117W	43.69
DAK1	YML070W	59.02
DAL4	YIR028W	43.55
DAP2	YHR028C	56.89
DBR1	YKL149C	38.04
DGA1	YOR245C	41.64
DIA2	YOR080W	25.69
DID2	YKR035W-A	24.00
DMC1	YER179W	58.93
DOG2	YHR043C	56.04
DON1	YDR273W	77.42
DPB4	YDR121W	40.44
DUN1	YDL101C	60.62
DUR1,2	YBR208C	17.55
DYN2	YDR424C	38.11
EAP1	YKL204W	39.74
ECM2	YBR065C	25.62
ECM31	YBR176W	35.54
EFT2	YDR385W	72.84

ELP6	YMR312W	28.09
EMP46	YLR080W	24.49
EPT1	YHR123W	58.66
ERG24	YNL280C	66.91
ERV29	YGR284C	18.11
FAA4	YMR246W	44.46
FAB1	YFR019W	44.89
FAR3	YMR052W	35.00
FCY21	YER060W	43.42
FIT2	YOR382W	28.16
FKH2	YNL068C	55.20
FRM2	YCL026C-A	30.70
FUI1	YBL042C	45.17
FUS1	YCL027W	30.00
FYV2	YIL054W	30.28
GAL11	YOL051W	54.06
GAL3	YDR009W	19.34
GAP1	YKR039W	41.29
GAT4	YIR013C	33.80
GGA2	YHR108W	67.48
GPD2	YOL059W	39.72
GPH1	YPR160W	41.64
GUP1	YGL084C	45.73
HAP1	YLR256W	25.37
HAP3	YBL021C	26.78
HAP4	YKL109W	39.66
HAP5	YOR358W	23.44
HOC1	YJR075W	28.44
HOM6	YJR139C	40.44
HRT2	YMR027W	57.60
HUT1	YPL244C	23.42
IAH1	YOR126C	60.49
IDP3	YNL009W	48.11
IES6	YEL044W	46.30
INP53	YOR109W	32.46
JLP1	YLL057C	32.53
KAR5	YMR065W	61.55
KGD2	YDR148C	38.75
KHA1	YJL094C	61.76
KSP1	YHR082C	70.86
KTR2	YKR061W	24.35
KTR3	YBR205W	17.64
LIP2	YLR239C	60.13
LYS1	YIR034C	18.62
MAC1	YMR021C	46.30
MAI1	YPL100W	38.75
MAK3	YPR051W	28.51
MCH4	YOL119C	25.48
MCK1	YNL307C	19.40
MEI5	YPL121C	46.31
MEP3	YPR138C	43.48
MET32	YDR253C	69.04
MGA1	YGR249W	45.95
MGA2	YIR033W	43.97
MIC17	YMR002W	38.82

MIG1	YGL055C	75.10
MIP6	YHR015W	57.24
MKT1	YNL085W	54.49
MLC2	YPR188C	50.75
MLH1	YMR167W	38.82
MNN10	YDR245W	87.24
MNS1	YJR131W	18.49
MOT3	YMR070W	47.29
MSL1	YIR009W	30.20
MSN5	YDR335W	75.95
MTD1	YKR080W	23.22
NAP1	YKR048C	35.00
NDE1	YMR145C	27.74
NIT1	YIL164C	43.06
NPL3	YDR432W	67.13
OPI3	YJR073C	28.37
OSM1	YJR051W	25.40
OYE2	YHR179W	38.82
PAU20	YOL161C	23.21
PAU7	YAR020C	27.80
PCL8	YPL219W	37.69
PDC6	YGR087C	57.10
PET18	YCR020C	21.17
PEX3	YDR329C	41.15
PEX6	YNL329C	19.53
PHM7	YOL084W	25.40
PHO4	YFR034C	26.53
PIB2	YGL023C	94.98
PMT2	YAL023C	25.06
POP2	YNR052C	41.34
PPS1	YBR276C	70.37
PRM7	YDL039C	47.22
PRR2	YDL214C	47.00
PUT3	YKL015W	22.02
QCR9	YGR183C	43.13
QRI8	YMR022W	42.70
RAD16	YBR114W	27.55
RAD55	YDR076W	26.40
RAV2	YDR202C	36.06
RGA1	YOR127W	41.29
RHO2	YNL090W	29.00
RIM20	YOR275C	54.35
RLF2	YPR018W	55.26
RNQ1	YCL028W	26.47
ROX1	YPR065W	45.77
RPA14	YDR156W	24.62
RPD3	YNL330C	31.27
RPL19A	YBR084C-A	52.80
RPL1A	YPL220W	20.58
RPL26A	YLR344W	37.06
RPS8A	YBL072C	19.24
RRM3	YHR031C	55.34
RSA3	YLR221C	40.16
RTT106	YNL206C	34.22
RUD3	YOR216C	26.33

RVS161	YCR009C	17.58
SAC2	YDR484W	31.90
SCD6	YPR129W	26.54
SDC25	YLL016W	20.11
SDH1	YKL148C	39.80
SDH2	YLL041C	31.84
SEC22	YLR268W	22.21
SER1	YOR184W	41.65
SFC1	YJR095W	26.60
SGN1	YIR001C	45.31
SGS1	YMR190C	25.13
SIC1	YLR079W	22.31
SIS2	YKR072C	49.42
SKS1	YPL026C	42.91
SLY41	YOR307C	17.86
SNF3	YDL194W	27.46
SNQ2	YDR011W	24.18
SPF1	YEL031W	70.09
SPO11	YHL022C	62.47
SPO69	YPR007C	49.62
SPT4	YGR063C	39.38
SSD1	YDR293C	96.01
SSF2	YDR312W	84.49
STE24	YJR117W	35.57
STV1	YMR054W	36.84
SUM1	YDR310C	77.86
SYT1	YPR095C	19.97
TOS4	YLR183C	51.82
TRK1	YJL129C	29.71
TRM2	YKR056W	27.82
TRP4	YDR354W	81.17
TRR2	YHR106W	61.69
TSA2	YDR453C	29.66
TYR1	YBR166C	39.95
UBA3	YPR066W	26.68
UBC5	YDR059C	43.91
UBP3	YER151C	22.09
UBX2	YML013W	24.59
URA1	YKL216W	23.95
URA2	YJL130C	25.76
UTR5	YEL035C	27.20
VAM3	YOR106W	30.98
VMA4	YOR332W	22.86
VPS35	YJL154C	31.20
VPS41	YDR080W	40.66
VPS62	YGR141W	42.77
VPS64	YDR200C	63.66
VPS74	YDR372C	80.60
VPS8	YAL002W	23.86
VTA1	YLR181C	52.44
VTC1	YER072W	41.22
VTS1	YOR359W	43.60
WSS1	YHR134W	56.47
YAF9	YNL107W	51.95
YAL027W	YAL027W	21.17

YAL066W	YAL066W	39.46
YAR030C	YAR030C	22.58
YBL055C	YBL055C	32.04
YBR022W	YBR022W	25.62
YBR100W	YBR100W	32.18
YBR219C	YBR219C	39.35
YBR225W	YBR225W	19.58
YBR238C	YBR238C	32.33
YCL013W	YCL013W	39.82
YCL023C	YCL023C	46.58
YCL045C	YCL045C	19.38
YCR016W	YCR016W	34.80
YDC1	YPL087W	24.98
YDL025C	YDL025C	25.41
YDR057W	YDR057W	48.64
YDR071C	YDR071C	35.65
YDR084C	YDR084C	23.01
YDR089W	YDR089W	19.74
YDR107C	YDR107C	30.99
YDR229W	YDR229W	64.09
YEL041W	YEL041W	74.54
YEL059W	YEL059W	64.52
YEL067C	YEL067C	35.93
YEL072W	YEL072W	66.00
YER071C	YER071C	81.53
YFR007W	YFR007W	29.71
YFR008W	YFR008W	41.15
YGL118C	YGL118C	28.09
YGL144C	YGL144C	41.08
YGL199C	YGL199C	28.16
YGR003W	YGR003W	55.48
YGR004W	YGR004W	55.84
YGR031W	YGR031W	50.40
YGR045C	YGR045C	55.41
YGR081C	YGR081C	61.69
YGR161C	YGR161C	42.56
YGR168C	YGR168C	56.19
YGR212W	YGR212W	36.49
YHL021C	YHL021C	51.04
YHP1	YDR451C	44.89
YHR022C	YHR022C	58.09
YHR121W	YHR121W	78.00
YHR198C	YHR198C	63.67
YHR199C	YHR199C	46.94
YIL105C	YIL105C	49.13
YIL163C	YIL163C	39.81
YIL166C	YIL166C	50.89
YIR043C	YIR043C	32.54
YJL027C	YJL027C	51.67
YJL043W	YJL043W	39.74
YJL068C	YJL068C	24.78
YJL131C	YJL131C	30.28
YJL163C	YJL163C	30.64
YJL216C	YJL216C	32.40
YJR001W	YJR001W	67.84

YJR079W	YJR079W	20.82
YJR080C	YJR080C	41.65
YKL090W	YKL090W	19.20
YKL102C	YKL102C	32.47
YKL151C	YKL151C	25.13
YKL177W	YKL177W	37.73
YKL222C	YKL222C	28.45
YKR033C	YKR033C	23.15
YKR064W	YKR064W	24.00
YKR078W	YKR078W	37.76
YLL014W	YLL014W	19.91
YLR072W	YLR072W	28.09
YLR073C	YLR073C	34.45
YLR089C	YLR089C	41.72
YLR194C	YLR194C	51.95
YLR199C	YLR199C	25.27
YLR262C-A	YLR262C-A	23.29
YLR279W	YLR279W	33.53
YLR312C	YLR312C	52.02
YLR324W	YLR324W	44.47
YLR326W	YLR326W	31.84
YLR352W	YLR352W	36.71
YLR404W	YLR404W	44.33
YLR413W	YLR413W	48.07
YLR455W	YLR455W	54.14
YML058C-A	YML058C-A	30.85
YML081W	YML081W	42.92
YMR029C	YMR029C	47.51
YMR102C	YMR102C	45.88
YMR188C	YMR188C	57.46
YMR258C	YMR258C	26.54
YMR310C	YMR310C	56.75
YNL056W	YNL056W	24.92
YNL122C	YNL122C	18.45
YNL134C	YNL134C	48.64
YNL140C	YNL140C	38.89
YNL157W	YNL157W	26.89
YNL187W	YNL187W	47.79
YOL037C	YOL037C	24.28
YOL054W	YOL054W	39.67
YOL070C	YOL070C	44.68
YOL071W	YOL071W	20.40
YOL099C	YOL099C	19.84
YOL106W	YOL106W	31.84
YOL125W	YOL125W	37.55
YOL155C	YOL155C	50.12
YOR108W	YOR108W	18.35
YOR129C	YOR129C	20.40
YOR271C	YOR271C	44.96
YOR277C	YOR277C	27.53
YOR300W	YOR300W	37.06
YPL030W	YPL030W	39.80
YPL095C	YPL095C	59.36
YPL103C	YPL103C	42.28
YPL105C	YPL105C	44.75

YPL108W	YPL108W	50.89
YPR015C	YPR015C	44.05
YPR031W	YPR031W	57.53
YPR096C	YPR096C	31.55
YSR3	YKR053C	45.95

Additional gene deletion strains of interest

AAC3	YBR085W
ABC1	YGL119W
ARE1	YCR048W
ARO2	YGL148W
AUS1	YOR011W
CCP1	YKR066C
COR1	YBL045C
COX15	YER141W
COX18	YGR062C
COX5B	YIL111W
COX9	YDL067C
CTA1	YDR256C
CTT1	YGR088W
DAN1	YJR150C
ELC1	YPL046C
FCY22	YER060W
FET3	YMR058W
FUN34	YNR002C
HLR1	YDR528W
HMG2	YLR450W
IDP2	YLR174W
LYS20	YDL182W
MDM31	YHR194W
MIC14	YDR031W
NCE103	YNL036W
NDI1	YML120C
PAU1	YJL223C
PAU2	YEL049W
PAU23	YLR037C
PAU24	YBR301W
PAU3	YCR104W
PAU5	YFL020C
PFK1	YGR240C
PFK2	YMR205C
PRD1	YCL057W
PUG1	YER185W
QCR8	YJL166W
RHR2	YIL053W
RPP1A	YDL081C
RTA1	YGR213C
SIM1	YIL123W
SLM1	YIL105C
SPE2	YOL052C
TDA3	YHR009C
TIR1	YER011W
TIR4	YOR009W

TRX3	YCR083W
VPS65	YLR322W
YBR235W	YBR235W
YFR017C	YFR017C
YHB1	YGR234W
YIG1	YPL201C
YOL024W	YOL024W
YPL041C	YPL041C