SUPPORTING INFORMATION

Colony lysate arrays for proteomic profiling of drug-tolerant persisters of cancer cell

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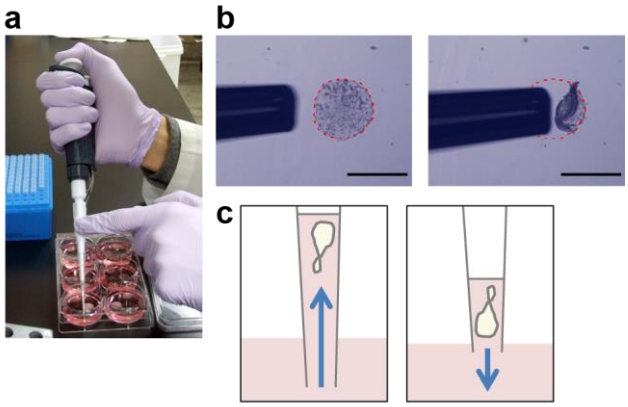

Figure S1. Colony picking method. (a) Pipette handling. Colonies are picked up by visual confirmation. (b) A microscopic view of a single colony at the pipette tip (left). The adhering colony is "scraped" and then aspirated into the pipette tip (right). Scale bars = 1.0 mm. (c) Dispensing excess medium. The detached colony is drawn up to the top of the medium (left). Excess medium can then be carefully dispensed. The colony is now transferred into Pink Buffer to be lysed.

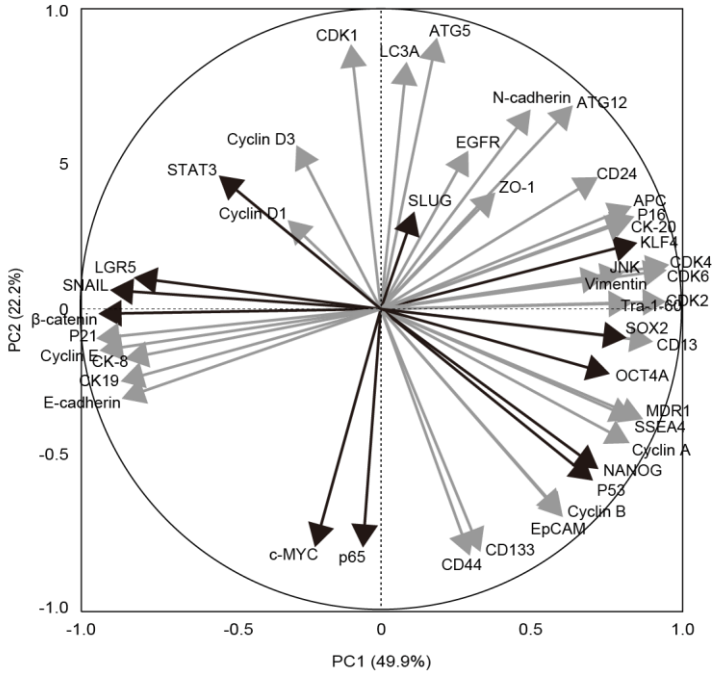

Figure S2. PCA loadings plot with the two principal components for GEF-induced DTPs. Proportions of the first (PC1) and second (PC2) principal components are 49.9% and 22.2%, respectively. Vectors indicate a total of 44 loadings of proteins tested. Vectors representing transcription factors are highlighted.

Table S1. Primary antibodies.

Target	Vendor	Catalog no.	Dilution
APC	Cell Signaling Technology	2504	1:100
ATG12	Cell Signaling Technology	4180	1:100
ATG5	Cell Signaling Technology	8540	1:100
β-catenin	Cell Signaling Technology	9582	1:100
CD13	Santa Cruz	sc-13536	1:100
CD133	Cell Signaling Technology	3663	1:100
CD24	Santa Cruz	sc-70598	1:100
CD44	Cell Signaling Technology	3570	1:100
CDK1	Becton Dickinson	610037	1:200
CDK2	Becton Dickinson	610145	1:200
CDK4	Becton Dickinson	610147	1:200
CDK6	Cell Signaling Technology	3136	1:200
CK-19	Thermo Fisher Scientific	MS-377	1:1000
CK-20	Thermo Fisher Scientific	MS-997	1:1000
CK-8	Thermo Fisher Scientific	MS-198	1:1000
c-MYC	Santa Cruz	sc-40	1:100
Cyclin A	Becton Dickinson	611268	1:200
Cyclin B	Becton Dickinson	610219	1:250
Cyclin D1	Cell Signaling Technology	2926	1:250
Cyclin D3	Cell Signaling Technology	2936	1:250
Cyclin E	Cell Signaling Technology	4129	1:250
E-cadherin	Cell Signaling Technology	3195	1:100
EGFR	Cell Signaling Technology	2232	1:100
EpCAM	Santa Cruz	sc-71057	1:100
JNK	Becton Dickinson	610627	1:100
KLF4	Cell Signaling Technology	4038	1:100
LC3A	Cell Signaling Technology	4599	1:100
LGR5	Becton Dickinson	562713	1:100
MDR1	Sigma	P7965	1:100
NANOG	Cell Signaling Technology	4903	1:100
N-cadherin	Cell Signaling Technology	4061	1:100
OCT4A	Cell Signaling Technology	2840	1:100
P16	Santa Cruz	sc-468	1:100
P21	Cell Signaling Technology	2946	1:200
P53	Thermo Fisher Scientific	MS-187	1:200
P65	Cell Signaling Technology	3034	1:100
SLUG	Cell Signaling Technology	9585	1:100
SNAIL	Cell Signaling Technology	2879	1:100
SOX2	Cell Signaling Technology	3579	1:200
SSEA4	Cell Signaling Technology	4755	1:200
STAT3	Cell Signaling Technology	9132	1:100
TRA-1-60	Cell Signaling Technology	4746	1:100
Vimentin	Cell Signaling Technology	5741	1:100
ZO-1	Cell Signaling Technology	5406	1:100

Table S2. Analytical methods for the smallest unit molecular profiling of a heterogeneous cell subpopulation.

Technology[a]	Readout	Probe	Minimum cells/sample	Sample throughput[b]	Maximum multiplexity	Evaluation of colony-forming ability	ref
CoLA	Colorimetric	Antibody	1000	1000-3000 samples/run	>100 antibodies	Yes	This work
IHC	Colorimetric or Fluorescent	Antibody	1	n/a	~2 antibodies	Yes	1
ICM	Fluorescent	Antibody	1	100-400 samples/run	~10 antibodies	Yes	2
FCM	Fluorescent	Antibody	100000	100-400 samples/run	~10 antibodies	No	3
MCM	Isotopic	Antibody	1000	100-400 samples/run	>30 antibodies	No	4
scWB	Fluorescent	Antibody	1	20–30 samples/run	~11 antibodies	No	5
scRNA-seq	Number of reads	Oligo-nucleotide	1	80 samples/run	>100000 transcripts	No	6
scRT-qPCR	Fluorescent	Oligo-nucleotide	1	3000 samples/run	>300 transcripts	No	7

[a]IHC, immunohistochemistry; ICM, image cytometry; FCM, flow cytometry; MCM, mass cytometry; scWB, single-cell Western blotting; scRNA-seq, single-cell RNA sequencing; scRT-qPCR, single-cell quantitative reverse transcription PCR. [b]n/a, not applicable.

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