

Key resources: Further information and requests for resources and reagents should be directed to and will be fulfilled by the Lead Contact Johanna Pachmayr (johanna.pachmayr@pmu.ac.at).

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Akt Antibody (rabbit)	Cell Signaling Technology	Cat#9272; RRID:AB_329827
Alexa Fluor 488 goat anti-rabbit	Thermo Fisher Scientific	Cat#A-11008; RRID:AB_143165
Alexa Fluor 488 goat-anti-mouse	Thermo Fisher Scientific	Cat#A-11001; RRID:AB_2534069
Alexa Fluor 546 donkey-anti-rabbit	Thermo Fisher Scientific	Cat#A-10040; RRID:AB_2534016
AMPK α (F6) Mouse mAb	Cell Signaling Technology	Cat# 2793; RRID:AB_915794
Bak antibody [Y164] (rabbit)	Abcam	Cat#ab32371; RRID:AB_725624
Bax Antibody (N-20) (rabbit)	Santa Cruz Biotechnology	Cat#sc-493; RRID:AB_2227995
Bcl-2 Antibody (Human Specific) (rabbit)	Cell Signaling Technology	Cat#2872; RRID:AB_10693462
Citrate Synthase Antibody (rabbit)	Thermo Fisher Scientific	Cat#PA5-22126; RRID:AB_11154268
COX4 Monoclonal Antibody (rabbit)	Thermo Fisher Scientific	Cat#MA5-15078; RRID:AB_10987478
DRP1 (D6C7) Rabbit mAb	Cell Signaling Technology	Cat#8570; RRID:AB_10950498
E-Cadherin (24E10) Rabbit mAb	Cell Signaling Technology	Cat#3195; RRID:AB_2291471
E-cadherin Monoclonal Antibody (HECD-1) (mouse)	Thermo Fisher Scientific	Cat#131700; RRID:AB_2533003
GADD 153 Antibody (R-20) (rabbit)	Santa Cruz Biotechnology	Cat#sc-793; RRID:AB_631364
Goat Anti-Mouse IgG1 (HRP)	Abcam	Cat#ab97120; RRID:AB_10679892
Goat-anti-mouse IgG1-HRP conjugate	Abcam	Cat#ab97240; RRID:AB_10695944
Goat-anti-rabbit IgG(H+L)-HRP conjugate	Bio-Rad	Cat#172-1019; RRID:AB_11125143
IDH2 Antibody (rabbit)	Novus Biologicals	Cat#22166SS
LC3A/B Antibody (rabbit)	Cell Signaling Technology	Cat#4108; RRID:AB_2137703
Mitofusin-1 (D6E2S) Rabbit mAb	Cell Signaling Technology	Cat#14739; RRID:AB_2744531
N-Cadherin Antibody (rabbit)	Cell Signaling Technology	Cat#4061; RRID:AB_10694647
NFkB p65 Antibody (C-20) (goat)	Santa Cruz Biotechnology	Cat#sc-372-G; RRID:AB_632037
OGDH Antibody (rabbit)	Novus Biologicals	Cat#19622;
OxPhos WB Antibody Cocktail (mouse)	Thermo Fisher Scientific	Cat#45-8099; RRID:AB_2533835
p38 MAPK Antibody (rabbit)	Cell Signaling Technology	Cat#9212; RRID:AB_330713
p44/42 MAPK (Erk1/2) Antibody (rabbit)	Cell Signaling Technology	Cat#9102; RRID:AB_330744
PGC1 alpha antibody (rabbit)	Abcam	Cat#ab54481; RRID:AB_881987
Phospho-Akt (Ser473) (rabbit)	Cell Signaling Technology	Cat#9271; RRID:AB_329825
Phospho-AMPK α (Thr172) (40H9) Rabbit mAb	Cell Signaling Technology	Cat#2535; RRID:AB_331250
Phospho-Erk (Thr202/Tyr204) (mouse)	Cell Signaling Technology	Cat#9106; RRID:AB_331768
Phospho-NFkBp65 (Ser536) (rabbit)	Cell Signaling Technology	Cat#3031; RRID:AB_330559
Phospho-p38MAPK (Thr180/182) (rabbit)	Cell Signaling Technology	Cat#9211; RRID:AB_331641
TFE3 Polyclonal Antibody (rabbit)	Thermo Fisher Scientific	Cat#PA5-35210; RRID:AB_2552520
TFEB Antibody (rabbit)	Cell Signaling Technology	Cat#4240; RRID:AB_11220225
Vimentin (D21H3) XP Rabbit mAb	Cell Signaling Technology	Cat#5741; RRID:AB_10695459

Critical Chemicals and Compounds		
ABT888 (PARP inhibitor)	Enzo Life Sciences	ALX-270-444; CAS 912445-05-7
Chloramphenicol (antibiotic)	Sigma-Aldrich	C0378; CAS 56-75-7
Cisplatin (chemotherapeutic)	Sigma-Aldrich	232120; CAS 15663-27-1
Doxorubicin hydrochloride (chemotherapeutic)	Sigma-Aldrich	D1515; CAS 25316-40-9
Everolimus (RAD001) (mTOR inhibitor)	Selleck Chemicals	S1120; CAS 159351-69-6
Gefitinib (ZD1839) (EGFR inhibitor)	Selleck Chemicals	S1025; CAS 184475-35-2
Linezolid (antibiotic)	Sigma-Aldrich	PZ0014; CAS 165800-03-3
SN38 (DNA topoisomerase inhibitor)	Tocris Bioscience	2684/10; CAS 86639-52-3
Sorafenib (multi kinase inhibitor)	Enzo Life Sciences	ALX-270-469; CAS 284461-73-0
Tigecycline hydrate (antibiotic)	Sigma-Aldrich	PZ0021; CAS 1229002-07-6
Tivantinib (ARQ 197) (c-Met inhibitor)	Selleck Chemicals	S2753; CAS 905854-02-6
Vincristine sulfate salt (chemotherapeutic)	Sigma-Aldrich	V8879; CAS 2068-78-2
Critical Commercial Assays		
CellTiterBlue® reagent	Promega	G8080
CellTiterGlo® reagent	Promega	G7570
CyQUANT® Cell Proliferation Assay Kit	Invitrogen	C7026
High-Capacity cDNA Reverse Transcription Kit	Applied Biosystems	10400745
L-Lactate Assay Kit	Cayman Chemical	No. 700510
Multi-Drug Resistance Assay Kit (Calcein AM)	Cayman Chemical	No. 600370
NAD/NADH Glo™	Promega	G9071
NADP/NADPH Glo™	Promega	G9081
RNeasy® Mini Kit (250)	QIAGEN	Cat#74106
ROS Detection Cell-Based Assay Kit (DCFDA)	Cayman Chemical	No. 601520
Seahorse XF Glycolysis Stress Test Kit	Agilent Technologies	103020-100
Deposited Data		
Analyzed data	This paper	N/A
MS-Lipidomics analysis – FFA_ACA	Mendeley Data	doi:10.17632/t5z8v7752m.1
MS-Lipidomics analysis – Phospholipids	Mendeley Data	
MS-Proteomics analysis – GSEA tables	Mendeley Data	
MS-Proteomics analysis – raw data and x-fold-change	Mendeley Data	
Experimental Models: Cell Lines		
HUH7-R	This paper	N/A
HUH7-R-LUC	This paper	N/A
HUH7-WT (HuH-7)	JCRB Cell Bank	JCRB0403
RIL175-R	This paper	N/A
RIL175-WT (RIL-175)	Kapanadze, et al., 2013	a gift from Prof. Rothenfußer, University Hospital, LMU Munich
VCR-R CEM	Haber et al., 1989	N/A

Experimental Models: Mice		
Fox Chase SCID mice	Charles River	CB17/lcr-Prkdcscid/lcrIcoCrl
SCID mice	Charles River	CB17/lcr-PrkdcSCID/lcrIcocrl
Oligonucleotides		
Primer: E-Cadherin, Forward: 5'-CAG CAC GTA CAC AGC CCT AA-3'	Metabion, this paper	N/A
Primer: E-Cadherin, Reverse: 5'-AAG ATA CCG GGG GAC ACT CA-3'	Metabion, this paper	N/A
RNA-sequence, Taq Man, PGC1 alpha (PPARGC1A) ligand	Invitrogen	Hs00173304_m1
siRNA IDH2	Dharmacon	M 004013-00-0005
siRNA LUC (no target)	Dharmacon	D 001206-14-05
siRNA OGDH	Dharmacon	M 009679-02-0005
Recombinant DNA		
pCDH-eFFLuc-T2A-eGFP	This paper	a gift from Prof. Jeremias, Helmholtz Zentrum München
pCMV-VSV-G	This paper	N/A
pCMV-dR8.2	This paper	N/A
Software and Algorithms		
FlowJo 7.6	Tree Star	RRID:SCR_008520
GraphPad Prism 7	GraphPad Software	RRID:SCR_002798
GSEA 3.0	The Broad Institute	http://software.broadinstitute.org/gsea/index.jsp ; RRID:SCR_003199
Image Lab 5.2	Bio-Rad	RRID:SCR_014210
ImageJ	National Institutes of Health	RRID: SCR_003070
Leica Application Suite X	Leica	RRID:SCR_013673
Living Image 4.4 software	Caliper Life Sciences GmbH	RRID:SCR_014247
MaxQuant	Max Planck Institute of Biochemistry, Munich	https://www.biochem.mpg.de/5111795/maxquant ; RRID:SCR_014485
Perseus 1.5.4.1.	Max Planck Institute of Biochemistry, Munich	https://www.biochem.mpg.de/5111810/perseus ; RRID:SCR_015753
RTCA	Roche Diagnostics	RRID:SCR_014821
Seahorse Wave 2.3.0	Agilent Technologies	RRID:SCR_014526
Fluorescent dyes		
2-NBDG	Invitrogen	N13195
Cal-520 AM	AAT Bioquest	21131
LysoTracker™ Red DND-99	Invitrogen	L7528
MitoSOX™ Red	Invitrogen	M36008
MitoTracker™ Green FM	Cell Signaling Technology	M7514