

**Supplementary table 14. Antibodies, primers, plasmids, reagents, clinical samples, and other materials used in this study**

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Anti-CD63 Antibody, clone RFAC4	Merck KGaA, Burlington, MA	CBL553
Anti-CD81 antibody	GeneTex, Inc, Irvine, CA	GTX101766
Alix (3A9) Mouse mAb	Cell Signaling Technology, Inc, Danvers, MA	#2171
Snail (L70G2) Mouse mAb, for WB	Cell Signaling Technology, Inc, Danvers, MA	#3895
Snail polyclonal antibody, for IHC	Abnova Corporation, Taipei, Taiwan	PAB1924
Monoclonal ANTI-FLAG® M2 antibody	Merck KGaA, Burlington, MA	F1804
Purified anti-HA.11 Epitope Tag Antibody	BioLegend, Inc, San Diego, CA	901502
Anti-Caspase-1 antibody	Abcam plc, Cambridge, UK	ab17820
IL-1 $\beta$ Antibody (H-153)	Santa Cruz Biotechnology, Inc, Santa Cruz, CA	sc-7884
Anti-IL-6 antibody [B-E8]	Abcam plc, Cambridge, UK	ab11449
Human IL-8/CXCL8 Antibody	R&D Systems, Inc, Minneapolis, MN	AF-208-NA
Human CCL2/JE/MCP-1 Antibody	R&D Systems, Inc, Minneapolis, MN	AF-279-NA
Human CCL5/RANTES Antibody	R&D Systems, Inc, Minneapolis, MN	AF-278-NA
ASC Antibody (N-15), for WB and IP	Santa Cruz Biotechnology, Inc, Santa Cruz, CA	sc-22514-R
ASC/TMS1 Antibody, for PLA	Novus Biologicals, Centennial, CO	NBP1-78977
anti-NLRP3/NALP3, mAb antibody (Cryo-2)	Adipogen Life Sciences, San Diego, CA	AG-20B-0014
K63-linkage Specific Polyubiquitin (D7A11) Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#5621
CD14 MicroBeads, human	Miltenyi Biotec, Bergisch Gladbach, Germany	130-050-201
IFN gamma Monoclonal Antibody (XMG1.2)	Thermo Fisher Scientific Inc, Waltham, MA	17-7311
CD8a Antibody, anti-mouse, PE	Miltenyi Biotec, Bergisch Gladbach, Germany	130-102-595
PE/Cyanine7 anti-mouse CD45 Antibody	BioLegend, Inc, San Diego, CA	103114
APC anti-mouse F4/80 Antibody	BioLegend, Inc, San Diego, CA	123116
PE/Cyanine7 Rat IgG2b, $\kappa$ Isotype Ctrl Antibody	BioLegend, Inc, San Diego, CA	400617

APC Rat IgG2a, $\kappa$ Isotype Ctrl Antibody	BioLegend, Inc, San Diego, CA	400511
CD68	Agilent Technologies, Inc, Santa Clara, CA	M0876
Goat anti-Mouse IgG	Thermo Fisher Scientific Inc, Waltham, MA	F2761
Anti-Actin Antibody	Thermo Fisher Scientific Inc, Waltham, MA	MAB1501
GAPDH (14C10) Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#2118
normal mouse IgG	Santa Cruz Biotechnology, Inc, Santa Cruz, CA	sc-2025
BRCC3 (D5E5H) Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#18215
PTEN (D4.3) XP® Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#9188
Anti-CD9 antibody	Abcam plc, Cambridge, UK	ab92726
Anti-CD81 antibody	GeneTex, Inc, Irvine, CA	GTX101766
Anti-Calreticulin antibody	Abcam plc, Cambridge, UK	ab39897
CD45 MicroBeads, mouse	Miltenyi Biotec, Bergisch Gladbach, Germany	130-052-301
PerCP anti-mouse F4/80 Antibody	BioLegend, Inc, San Diego, CA	123126
Gasdermin D (E8G3F) Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#97558
A20/TNFAIP3 (D13H3) Rabbit mAb	Cell Signaling Technology, Inc, Danvers, MA	#5630
CD4, for multiplex IHC	Thermo Fisher Scientific Inc, Waltham, MA	Clone: 4B12
CD8a, for multiplex IHC	Thermo Fisher Scientific Inc, Waltham, MA	Clone: C8/144B
CD163, for multiplex IHC	Thermo Fisher Scientific Inc, Waltham, MA	Clone: 10D6
CD68, for multiplex IHC	Abcam plc, Cambridge, UK	Clone: KPI
CD66b, for multiplex IHC	BD, Franklin Lakes, NJ	Clone: G10F5
PanCK, for multiplex IHC	Abcam plc, Cambridge, UK	Clone: AE1/AE3+5D3
<b>Bacterial and Virus Strains</b>		
Stbl3	Thermo Fisher Scientific Inc, Waltham, MA	C737303
<b>Biological Samples</b>		
9 samples from HNSCC patients for multiplex immunofluorescent staining (Figure S1A, Table S1)	Taipei Veterans General Hospital	TVGH-IRB certificate No.2018-06-00

44 tumor samples with 21 normal counterparts from 21 HNSCC patients for RNA-seq analysis (Figure 1B, Table S2)	Taipei Veterans General Hospital	TVGH-IRB certificate No.2017-05-013AC IBC
50 samples from HNSCC patients for RT-qPCR (Figure 7B, Table S10)	Taipei Veterans General Hospital	TVGH-IRB certificate No. 2014-03-004AC
Serum and tissue samples from 19 HNSCC patients (Figure 7C-D, Table S11)	Taipei Veterans General Hospital	TVGH-IRB certificate No. 2014-03-004AC
5 samples from 5 HNSCC patient for immunofluorescence and PLA (Figure 7E, Table S12)	Taipei Veterans General Hospital	TVGH-IRB certificate No. 2014-03-004AC
PBMC from healthy donors	Taipei Veterans General Hospital	TVGH-IRB certificate No. 2014-03-004AC
<b>Chemicals, Peptides, and Recombinant Proteins</b>		
Nigericin sodium salt	Merck KGaA, Burlington, MA	N7143
Phorbol 12-myristate 13-acetate (PMA)	Cayman Chemical, Ann Arbor, MI	10008014
Lipopolysaccharides (LPS)	Merck KGaA, Burlington, MA	L4391
Cisplatin	Merck KGaA, Burlington, MA	PHR1624
T-Pro NTR III	JF Ji-Feng Biotechnology, New Taipei County, Taiwan	JT97-N006M
Human IFN- $\gamma$	PeproTech, Inc, Cranbury, NJ	300-02
Murine Ifn- $\gamma$	PeproTech, Inc, Cranbury, NJ	315-05
Human GM-CSF	PeproTech, Inc, Cranbury, NJ	300-03
Murine Gm-csf	PeproTech, Inc, Cranbury, NJ	315-03
7-AAD Staining Solution	Abcam plc, Cambridge, UK	ab228563
SYTOX™ Green Nucleic Acid Stain	Thermo Fisher Scientific Inc, Waltham, MA	S7020
<b>Critical Commercial Assays</b>		
IL-1 beta Human Instant ELISA™ Kit	Thermo Fisher Scientific Inc, Waltham, MA	BMS224INST
Mouse Il-1 beta Instant ELISA™ Kit	Thermo Fisher Scientific Inc, Waltham, MA	BMS6002INST
TA Cloning™ Kit	Thermo Fisher Scientific Inc, Waltham, MA	K202020
Duolink™ In Situ PLA® Probe Anti-Mouse PLUS	Merck KGaA, Burlington, MA	DUO92001
Duolink™ In Situ PLA® Probe Anti-Rabbit MINUS	Merck KGaA, Burlington, MA	DUO92005
Duolink™ In Situ Detection Reagents Red	Merck KGaA, Burlington, MA	DUO92008

FLICA 660 Caspase-1 Assay	ImmunoChemistry Technologies, LLC, Bloomington, MN	#9122
Tumor Dissociation Kit, mouse	Miltenyi Biotec, Bergisch Gladbach, Germany	130-096-730
Dead Cell Removal Kit	Miltenyi Biotec, Bergisch Gladbach, Germany	130-090-101
Opal Polaris 7 Color IHC Detection Kits	Akoya Biosciences, Inc, Marlborough, MA	NEL861001KT
<b>Deposited Data</b>		
TCGA HNSCC RNA sequence data	National cancer institute, Rockville, MD	<a href="https://www.cancer.gov/about-nci/organization/ccg/research/structural-genomics/tcga">https://www.cancer.gov/about-nci/organization/ccg/research/structural-genomics/tcga</a>
TVGH RNA sequence data	This paper	GSE178537
scRNA-seq of CD45+ cells of MTCQ1-WT/MTCQ1 <sup>mir21-/-</sup> formed tumors	This paper	GSE172326
small RNA sequencing of the cancer cell-secreted exosomes	This paper	GSE99474
Visium spatial gene expression data	This paper	GSE181300
<b>Experimental Models: Cell Lines</b>		
Human: FaDu cells	ATCC, Manassas, VA	HTB-43
Human: OECM1 cells	Dr. Kuo-Wei Chang's lab	Hung et al., 2014
Human: THP-1 cells	ATCC, Manassas, VA	TIB-202
Human: HEK 293T cells	ATCC, Manassas, VA	CRL-3216
Mouse: MTC-Q1	Dr. Kuo-Wei Chang's lab	(Chen et al., 2019)
Mouse: LLC1	ATCC, Manassas, VA	CRL-1642
Mouse: 4T1	ATCC, Manassas, VA	CRL-2539
<b>Experimental Models: Organisms/Strains</b>		
Mouse: C57BL/6JNarl	National Laboratory Animal Center, Taipei, Taiwan	N/A
Mouse: BALB/cByJNarl	National Laboratory Animal Center, Taipei, Taiwan	N/A
Mouse: Nlrp3 <sup>-/-</sup>	Dr. Nien-Jung Chen's lab	N/A
<b>Oligonucleotides</b>		
miR-21-5p agomir	Ribobio Corp, Guangzhou, China.	miR40000790-1-2
agomir Negative Control	Ribobio Corp, Guangzhou, China.	miR04201-1-10
<b>Recombinant DNA</b>		
pCDH-CMV-MCS-EF1-puro vector	System Biosciences	CD710B-1
pMD.G	RNA Technology Platform and Gene Manipulation Core of Academia Sinica, Taipei, Taiwan	C6-6-1

pCMVΔR8.91	RNA Technology Platform and Gene Manipulation Core of Academia Sinica, Taipei, Taiwan	C6-6-1
pMIR-REPORT	Thermo Fisher Scientific Inc, Waltham, MA	AM5795
pRK5-HA-Ubiquitin-K63	Addgene, Watertown, MA	#17606
pLKO.1-scramble	RNA Technology Platform and Gene Manipulation Core of Academia Sinica, Taiwan	ASN0000000004
pLKO.1-SNAI1 shRNA	RNA Technology Platform and Gene Manipulation Core of Academia Sinica, Taiwan	TRCN0000063818
pLKO.1-mouse Snai1 shRNA	RNA Technology Platform and Gene Manipulation Core of Academia Sinica, Taiwan	TRCN0000234034
pGreenPuro control lentivector ( control for pmiRZip21)	System Biosciences, LLC, Palo Alto, CA	SI505A-1
pmiRZip21 anti-miR-21 expression lentivector	System Biosciences, LLC, Palo Alto, CA	MZIP21-PA-1
pcDNA3-Flag-NLRP3	Dr. Szu-Ting Chen's lab	N/A
SgRNA/Cas9-MIR21-1: GTCTGATAAGCTACCCGACAAGG	Dr. Tsai-Yu Tzeng's lab	subcloned into PX459 by BbsI site.
SgRNA/Cas9-MIR21-2: TCATGGCAACACCAGTCGATTGG	Dr. Tsai-Yu Tzeng's lab	subcloned into PX459 by BbsI site.
SgRNA/Cas9 -mMIR21a-1: GTCTGATAAGCTATCCGACAAGG	Dr. Tsai-Yu Tzeng's lab	subcloned into PX459 by BbsI site.
SgRNA/Cas9-mMIR21a-2: TCATGGCAACAGCAGTCGATGGG	Dr. Tsai-Yu Tzeng's lab	subcloned into PX459 by BbsI site.
<b>Software and Algorithms</b>		
ImageJ	Schneider et al., 2012	<a href="https://imagej.nih.gov/ij/">https://imagej.nih.gov/ij/</a>
GraphPad Prism8	GraphPad Software, San Diego, CA	<a href="https://www.graphpad.com/">https://www.graphpad.com/</a>
FV31S-SW	Olympus Corporation, Tokyo, Japan	<a href="https://www.olympus-global.com/">https://www.olympus-global.com/</a>
Partek Flow	Partek, St. Louis, MO	<a href="https://www.partek.com/partek-flow/">https://www.partek.com/partek-flow/</a>
CIPR	N/A	(Ekiz et al., 2020)
DAVID Bioinformatics Resources 6.8	N/A	(Huang da et al., 2009)
GSEA	N/A	(Subramanian et al., 2005)

Oligonucleotides	
Primers for reverse transcription	Sequence (5'-3')
hsa-mir-21	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACTCAACA
hsa-mir-10a	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCACAAA
hsa-mir-30a	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCTTCCA
hsa-mir-30d	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCTTCCA
hsa-let-7i	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAACAGC
hsa-mir-182	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAGTGTG
hsa-mir-191	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCAGCTG
hsa-mir-205	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCAGACT
hsa-mir-1246	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCCTGCT
hsa-mir-4792	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACGCCAGC
qPCR primers	Sequence (5'-3')
<i>BRCC3</i> -F	TTCCCGATAGTGACATGAGG
<i>BRCC3</i> -R	CAGGCCCAAAAGAGTTCAGA
miR-21-F	GCCGCTTAGCTTATCAGACTGA
miR-21-R	GTGCAGGGTCCGAGGT
Ifng-F (m)	CGGCACAGTCATTGAAAGCCTA
Ifng-R (m)	GTTGCTGATGGCCTGATTGTC
<i>CXCL10</i> -F	GCAGGTACAGCGTACGGTTC
<i>CXCL10</i> -R	CAGCAGAGGAACCTCCAGTC
<i>CXCL9</i> -F	CCTTAAACAATTTGCCCAA
<i>CXCL9</i> -R	TCACATCTGCTGAATCTGGG
<i>IFNG</i> -F	TGTATTGCTTTGCGTTGGAC
<i>IFNG</i> -R	TGACCAGAGCATCCAAAAGA
<i>GAPDH</i> -F	AAGGTCGGAGTCAACGGATTTG
<i>GAPDH</i> -R	CCATGGGTGGAATCATATTGGAA
<i>U6</i> -F	CTCGCTTCGGCAGCAC
<i>U6</i> -R	AACGCTTCACGAATTTGCG
<i>ASC</i> -F	CAGGACCTTCCCGTACAGAG
<i>ASC</i> -R	CAGGACCTTCCCGTACAGAG
<i>NLRP3</i> -F	ACGTAAGGCCAGAATTCACC
<i>NLRP3</i> -R	GAATGCCTTGGGAGACTCAG
<i>PDCD4</i> -F	TCCTCAGTCCCAGCATTTC
<i>PDCD4</i> -R	TGCAAGCGAAATTAAGGGAA
miR-205-F	GCCGCTTCCTTCATTCCACCGG
miR-205-R	GTGCAGGGTCCGAGGT
miR-30a-F	GCCGCTTGTAACATCCTCGAC
miR-30a-R	GTGCAGGGTCCGAGGT
miR-182-F	GCCGCTTTTGGCAATGGTAGAACT

miR-182-R	GTGCAGGGTCCGAGGT
miR-30d-F	GCCGCTTGTAACATCCCCGAC
miR-30d-R	GTGCAGGGTCCGAGGT
miR-4792-F	GCCGCTCGGTGAGCGCTC
miR-4702-R	GTGCAGGGTCCGAGGT
let-7i-F	GCCGCTTGAGGTAGTAGTTTGT
let-7i-R	GTGCAGGGTCCGAGGT
miR-10a-F	GCCGCTTACCCTGTAGATCCGAA
miR-10a-R	GTGCAGGGTCCGAGGT
miR-191-F	GCCGCTCAACGGAATCCCAAAG
miR-191-R	GTGCAGGGTCCGAGGT
miR-1246-F	GCCGCTAATGGATTTTGG
miR-1246-R	GTGCAGGGTCCGAGGT
<i>Gapdh</i> -F (m)	CATGGCCTTCCGTGTTTCCTA
<i>Gapdh</i> -R (m)	TGTCATCATACTTGGCAGGTTTCT
<i>Snail</i> -F (m)	CACACGCGTGCCTTGTGTCT
<i>Snail</i> -F (m)	GGTCAGCAAAAAGCACGGTT
pri-miR-21-F	AATCCTGCCTGACTGTCCG
pri-miR-21-R	ATGTCAGACAGCCCATCGAC