

Table S1. Primer and siRNA sequences

	Sense (5'-3')	Antisense (5'-3')
RT-qPCR		
<i>Anxa2</i>	ATGTCTACTGTCCACGAAATCCT	CGAAGTTGGTGTAGGGTTTGACT
<i>Havcr</i>	GTAAACCAGAGATTCCCACACG	TCTCATGGGGACAAAATGTAGTG
<i>Lcn2</i>	TGGCCCTGAGTGTCATGTG	CTCTTGTAGCTCATAGATGGTGC
<i>Nlrp3</i>	ATTACCCGCCCCGAGAAAGG	TCGCAGCAAAGATCCACACAG
<i>Tnf</i>	CCCTCACACTCAGATCATCTTCT	GCTACGACGTGGGCTACAG
<i>Il6</i>	TACCACTTCACAAGTCGGAGGC	CTGCAAGTGCATCATCGTTGTTC
<i>Il1b</i>	GCAACTGTTCTGAACTCAACT	ATCTTTTGGGGTCCGTCAACT
<i>Cxcl1</i>	CTGGGATTCACCTCAAGAACATC	CAGGGTCAAGGCAAGCCTC
<i>Cxcl2</i>	TCCAGAGCTTGAGTGTGACG	GCTTCAGGGTCAAGGCAAAC
<i>Gapdh</i>	CAAGAAGGTGGTGAAGCAGG	AGGTGGAAGAGTGGGAGTTG
PCR		
<i>Anxa2</i> -WT	ACTTGTCACAGTAAGGAGGATGTG	TCTGGGATGAGTACCTAGTCGAG
<i>Anxa2</i> -Mut	ACTTGTCACAGTAAGGAGGATGTG	GTTGGTAAAGACGACCAAGATGATG
siRNA		
siNC	UUCUCCGAACGUGUCACGUTT	ACGUGACACGUUCGGAGAATT
si <i>Anxa2</i>	CCUGACAAACCGCAGCAAUTT	AUUGCUGCGGUUUGUCAGGTT
si <i>Chmp2a</i>	CGUGCGUACCCGGAGAUAUTT	AUAUCUCCCGGUACCCACCTT

Table S2. Antibody information

Target	Conjugate	Clone	Reactivity *	Cat No.	Brand	Application
ANXA2	-	D11G2	M/H	8235T	CST	WB, IHC, IP
MLKL	-	-	M/H	66675-1-Ig	Proteintech	WB
p-MLKL (Ser345)	-	EPR9515(2)	M	ab196436	Abcam	WB, IF
Caspase-3	-	-	M/H	19677-1-AP	Proteintech	WB
Cleaved Caspase-3	-	-	M/H	25128-1-AP	Proteintech	WB
GPX4	-	-	M/H	30388-1-AP	Proteintech	WB
GSDMD	-	-	M/H	20770-1-AP	Proteintech	WB
Cleaved GSDMD (Gly277)	-	F8K1V	M	60735T	CST	WB
CHMP2A	-	-	M/H	10477-1-AP	Proteintech	WB, IHC, IP
CHMP2B	-	-	M/H	12527-1-AP	Proteintech	WB
VPS24	-	-	M/H	HY-P82817	MCE	WB
CHMP4B	-	-	M/H	13683-1-AP	Proteintech	WB
VPS4B	-	-	M/H	17673-1-AP	Proteintech	WB
GAPDH	-	-	M/H	60004-1-Ig	Proteintech	WB
β-tubulin	-	-	M/H	BE0025	Bioeasytech	WB
ATP1A1	-	-	M/H	14418-1-AP	Proteintech	WB
IgG (H+L)	HRP	-	M	RGAM001	Proteintech	WB
IgG (H+L)	HRP	-	R	SA00001-2	Proteintech	WB
Ly-6G	-	-	M	GB11229	Servicebio	IHC
α-SMA	-	-	M/H	14395-1-AP	Proteintech	IHC
SLC12A1	-	-	M/H	18970-1-AP	Proteintech	IHC
AQP2	-	-	M/H	29386-1-AP	Proteintech	IHC
ATP6V1G3	-	-	M/H	19523-1-AP	Proteintech	IHC
IgG (H+L)	Polymer HRP	-	R	RGAR011	Proteintech	IHC
AQP1	-	-	M/H	20333-1-AP	Proteintech	IF
IgG (H+L)	CoraLite® Plus 488	-	R	RGAR002	Proteintech	IF
CD45	Brilliant Violet™ 421	30-F11	M	103133	Biolegend	FC
CD11b	Alexa Fluor® 488	M1/70	M/H	101217	Biolegend	FC

F4/80	APC	QA17A29	M	157306	Biolegend	FC
Ly-6G	APC/Cyanine7	1A8	M	127624	Biolegend	FC
Ly-6C	PE	HK1.4	M	128008	Biolegend	FC

*H, Human; M, Mouse; R, Rabbit

Table S3. Data for three independently prepared batches

Sample	Size (nm)	Zeta potential (mV)	PDI
LNP			
1	139.2	14	0.192
2	145.2	13.1	0.195
3	132.9	12.3	0.191
LNP@ANXA2			
1	152.1	16.4	0.205
2	162.5	15.3	0.209
3	159.7	14.5	0.212
KTP-LNP@ANXA2			
1	186.8	-4.41	0.187
2	182	-3.44	0.183
3	189	-5.22	0.189