

## Supplementary Material

### SAMHD1 attenuates acute inflammation by maintaining mitochondria function in macrophages via interaction with VDAC1

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#### 1 Supplementary Data

Results of co-immunoprecipitation coupled to mass spectrometry (IP-MS) has been presented in two Excel files, Data Sheet 1 represents IP conducted with Control IgG antibody. Data Sheet 2 represents IP conducted with Samhd1 antibody.

#### 2 Supplementary Tables

Primer sequences of qPCR	
mIL-6 Forward	CTGCAAGAGACTTCCATCCAG
mIL-6 Reverse	AGTGGTATAGACAGGTCTGTTGG
mTNF $\alpha$ Forward	CTGAACTTCGGGGTGATCGG
mTNF $\alpha$ Reverse	GGCTTGTCCTCGAATTTGAGA
mIFN $\beta$ Forward	CAGCTCCAAGAAAGGACGAAC
mIFN $\beta$ Reverse	GGCAGTGTAACCTTTCTGCAT
m $\beta$ -actin Forward	GGCTGTATTCCCCTCCATCG
m $\beta$ -actin Reverse	CCAGTTGGTAACAATGCCATGT

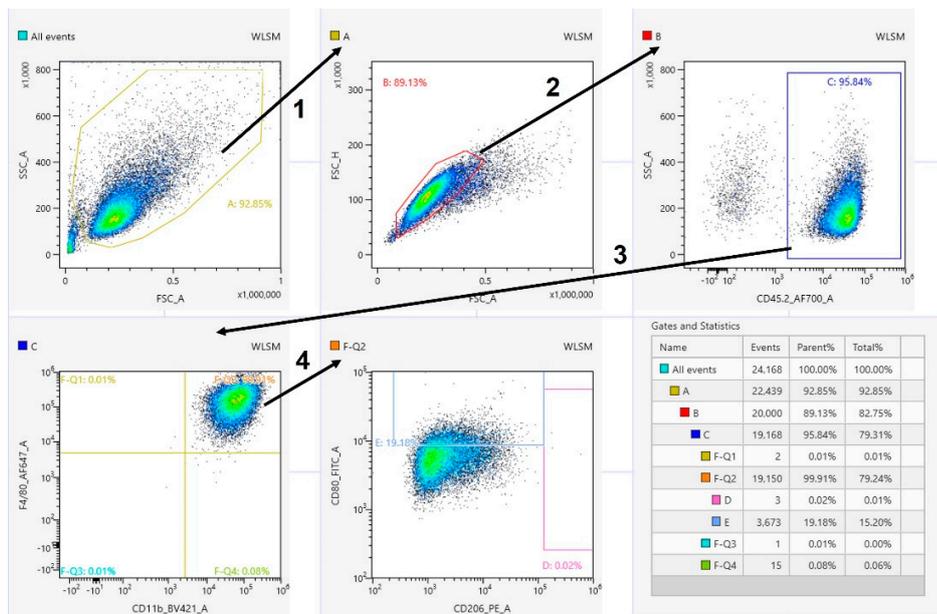
Supplementary Table S1. Primer sequences of qPCR

Antibody information		
Samhd1 mouse mAb for WB and IF	ab128107	Abcam, UK
Samhd1 rabbit pAb for co-IP	12586-1-AP	Proteintech, China
Vdac1 rabbit pAb for IF	55259-1-AP	Proteintech, China
Vdac1 rabbit mAb for WB	A19707	Abclonal, China
Vdac2 rabbit mAb for WB	A21260	Abclonal, China
$\beta$ -Tubulin Rabbit mAb	A12289	Abclonal, China
Phospho-IKK $\alpha$ / $\beta$ (Ser176/180) rabbit mAb	2697T	CST, USA
IKK $\alpha$ rabbit mAb	a19694	Abclonal, China
Phospho-I $\kappa$ B $\alpha$ (Ser32) (14D4) rabbit mAb	2859S	CST, USA
I $\kappa$ B $\alpha$ (44D4) rabbit mAb	4812S	CST, USA
Phospho-NF- $\kappa$ B p65 (Ser536) (93H1) Rabbit mAb	3033S	CST, USA
NF- $\kappa$ B p65 (D14E12) XP <sup>®</sup> Rabbit mAb	8242S	CST, USA
Phospho-TBK1 (Ser172) (D52C2) XP <sup>®</sup> Rabbit mAb	5483S	CST, USA
TBK1/NAK (E8I3G) Rabbit mAb	38066S	CST, USA

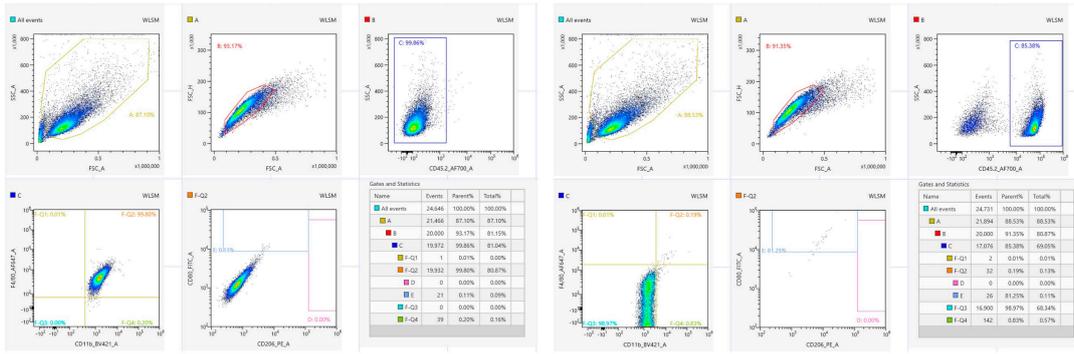
Phospho-Erk1/2 MAPK (Thr202/Tyr204) mouse mAb	9106S	CST, USA
p44/42 MAPK (Erk1/2) Antibody	9102S	CST, USA
Phospho-p38 MAPK (Thr180/Tyr182) Antibody	9211S	CST, USA
p38 MAPK Antibody	9212S	CST, USA
Phospho-JNK (Thr183/Tyr185) (81E11) rabbit mAb	4668S	CST, USA
JNK2 (56G8) Rabbit mAb	9258S	CST, USA
AF647 anti-mouse F4/80 Antibody for FC	123122	Biolegend, USA
BV421 anti-mouse/human CD11b Antibody for FC	101235	Biolegend, USA
FITC anti-mouse CD80 Antibody for FC	104706	Biolegend, USA
AF700 anti-mouse CD86 Antibody for FC	105122	Biolegend, USA
AF700 anti-mouse CD45.2 Antibody for FC	56-0454-81	Invitrogen, USA
Rat Anti-Mouse CD16/CD32 Antibody	553141	BD, USA
PE anti-mouse CD206 (MMR) Antibody for FC	141706	Biolegend, USA

Supplementary Table S2. Antibody information

### 3 Gating strategy, single controls and fluorescence-minus-one (FMO) controls of flow cytometry (FCM)

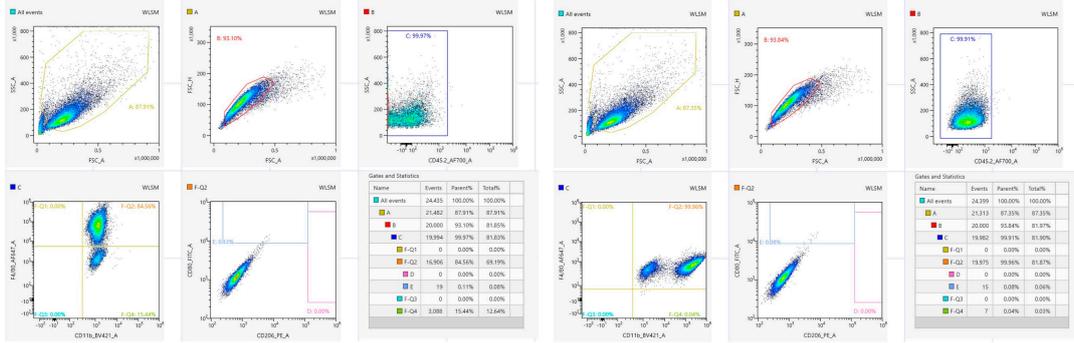


Supplementary Figure S2. Gating strategy of M1/M2 polarization FCM.



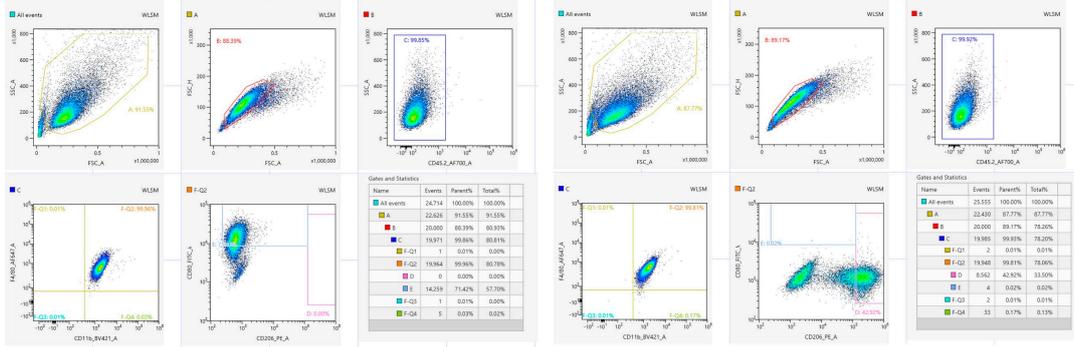
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CD45 single positive control



F4/80 single positive control

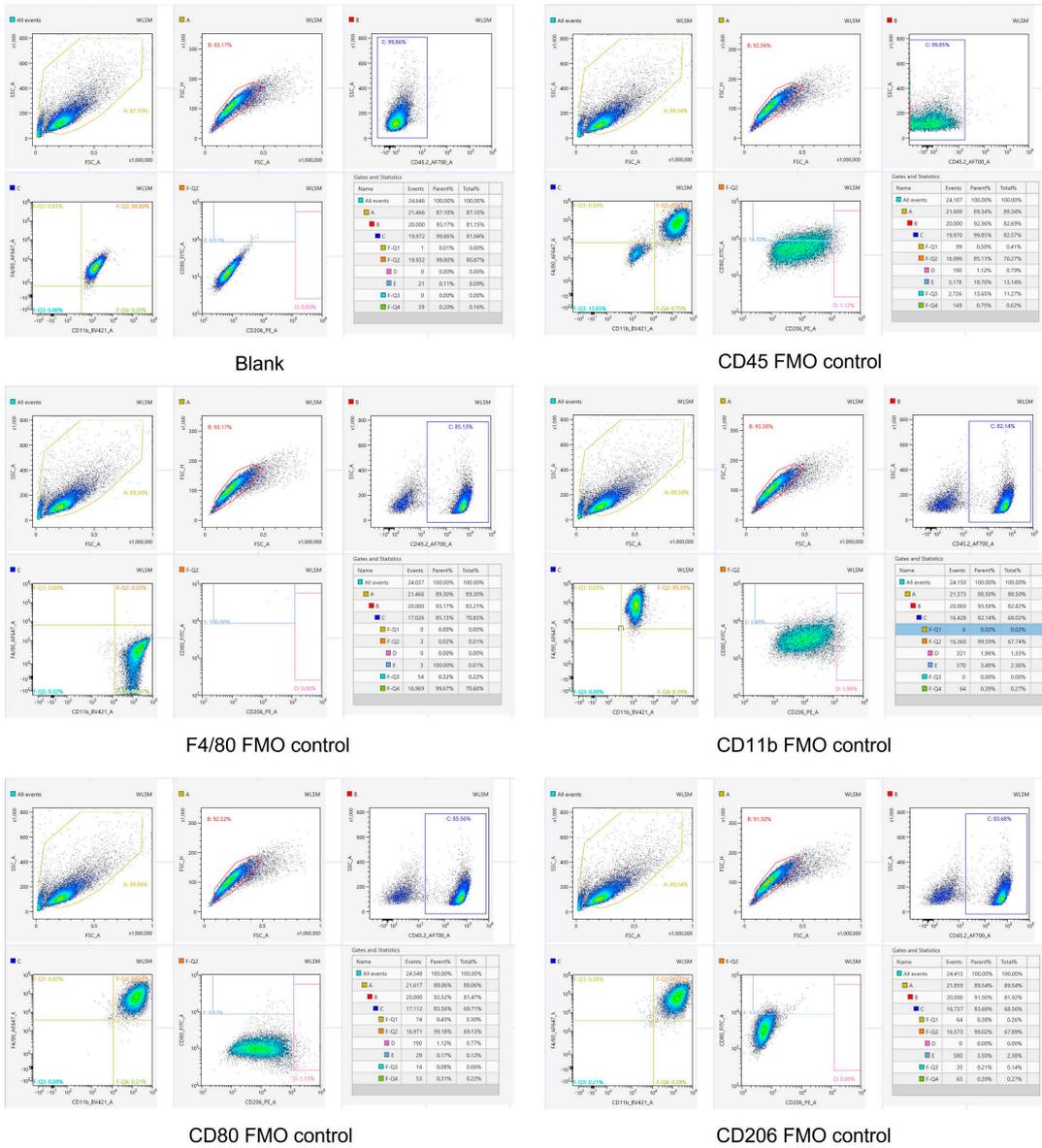
CD11b single positive control



CD80 single positive control

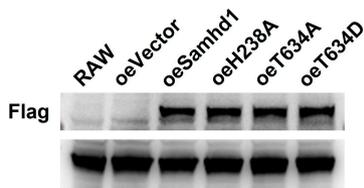
CD206 single positive control

Supplementary Figure S2. Single positive controls of M1/M2 polarization FCM.



Supplementary Figure S3. FMO controls of M1/M2 polarization FCM.

#### 4 Expression efficiency of the mutant plasmids



Supplementary Figure S4. Re-expression efficiency of SAMHD1 and its mutants detected by Flag tag.