

1 **Supplementary materials**

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3 **Tables**

4 **Table S1. Sequences of primers used in RT-qPCR for mRNA detections**

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Gene name	Accession number	Sequence( 5'–3' )
PGC-1 $\alpha$	NC_000004.12	F ACACAGTCGCAGTCACAACAC
		R GCAGTTCCAGAGAGTTCCACA
NRF1	NC_000007.14	F CCAGTTTAGTGGGTGGTAGG
		R CGGGAGCTTTCAAGACATTC
TFAM	NC_000010.11	F AATGGATAGGCACAGGAAACC
		R CAAGTATTATGCTGGCAGAAGTC
CO1	NC_012920.1	F ACGTTGTAGCCCACTTCCAC
		R TGGCGTAGGTTTGGTCTAGG
CO2	NC_012920.1	F TACACCGACTACGGCGGACT
		R AACGTCAAGGAGTCGCAGGT
CO3	NC_012920.1	F CCCACCAATCACATGCCTAT
		R GAGGAGCGTTATGGAGTGGA
ATP6	NC_012920.1	F ACTGCAGGCCACCTACTCAT
		R TTAAGGCGACAGCGATTTCT
ATP8	NC_012920.1	F ATACTACCGTATGGCCCACCA
		R GGGCTTTGGTGAGGGAGGTA
GAPDH	NC_000012.12	F AGAAGGCTGGGGCTCATTG
		R AGGGGCCATCCACAGTCTTC

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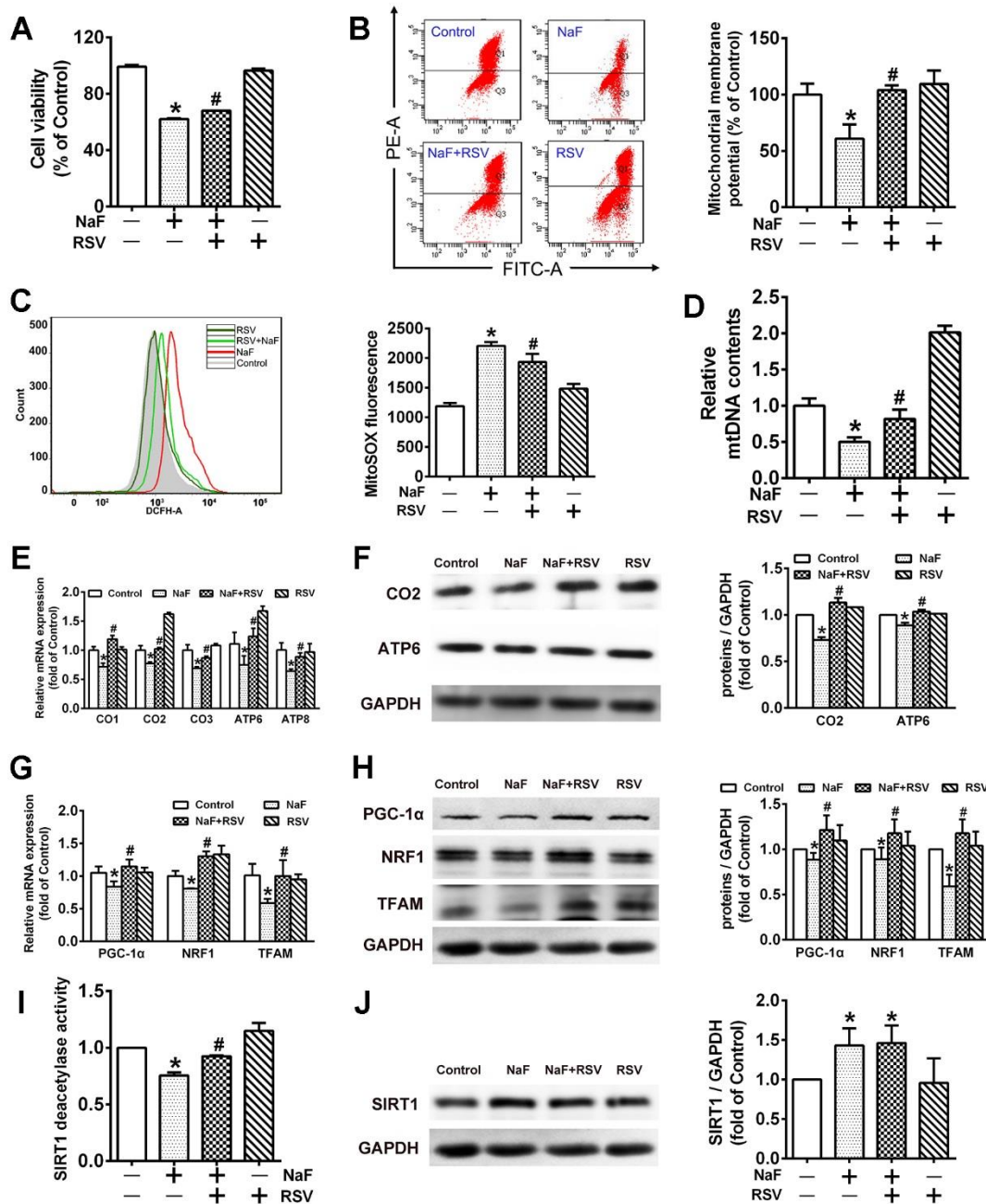
8 **Table S2. Sequences of primers used in RT-qPCR for measurement of relative**  
9 **mtDNA contents**

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Gene name	Accession number	Sequence( 5'– 3' )	
ND4	NC_001665.2	F	CTCATCAGTAAGCCATATAGC
		R	TTCGTTTCGTAGTTGGTGTT
GAPDH	NC_005103.4	F	GGAAGGACTCATGACCACAGT
		R	GCCATCACGCCACAGTTTC

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14 **Figure S1. RSV protects against neurotoxic effects of NaF in SHSY5Y cells.**

15 (A) Cell viability determined by CCK-8 assay. (B, C) Represent flow plots of MMP  
 16 levels (B) and mitoROS production (C) by flow cytometry. (D) RT-qPCR analysis of  
 17 relative mtDNA contents. (E, F) RT-qPCR (E) and immunoblot (F) analyses of  
 18 mRNA and protein levels of representative genes encoded by mtDNA. GAPDH was  
 19 used as the internal control. (G, H) RT-qPCR (G) and immunoblot (H) analyses of

20 mRNA and protein levels of PGC-1 $\alpha$ , NFF1 and TFAM. **(I)** SIRT1 deacetylase  
21 activity measured by SIRT1 assay kit. **(J)** Immunoblot analysis of SIRT1 expression.  
22 SH-SY5Y cells were pretreated with 20  $\mu$ M RSV and 2 h later were treated with 60  
23 mg/L NaF for 24 h. Data information: Data are presented as mean  $\pm$  SD. Data were  
24 cumulative of at least three independent experiments. \*  $P < 0.05$  is considered  
25 significant compared with Control and #  $P < 0.05$  is significantly different from NaF  
26 group by one-way ANOVA test.