

Supplementary Information

Rotundifuran Induces Ferroptotic Cell Death and Mitochondria Permeability Transition in Lung
Cancer Cells
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● Supplementary Figures

Figure S1. Original western blots in Figure 3 2

Figure S2. Original western blots in Figure 4 3

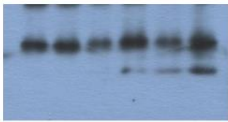
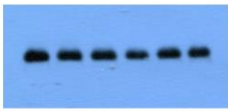


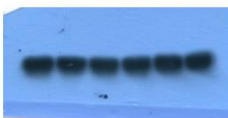
Figure S3. Original western blots in Figure 64

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● Supplementary Table

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(A)

Target	Size	Original image
LC3	14, 16 kDa	
Beclin1c	52 kDa	
ATG5	32 kDa	
p62	62 kDa	
Tubulin	50 kDa	

(B)

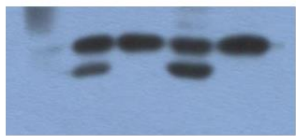
Target	Size	Original image
LC3	14, 16 kDa	

Figure S1. Original western blots in Figure 7. **(A)** Uncropped and unprocessed images of Figure 3D. **(B)** Original images of Figure 3E.

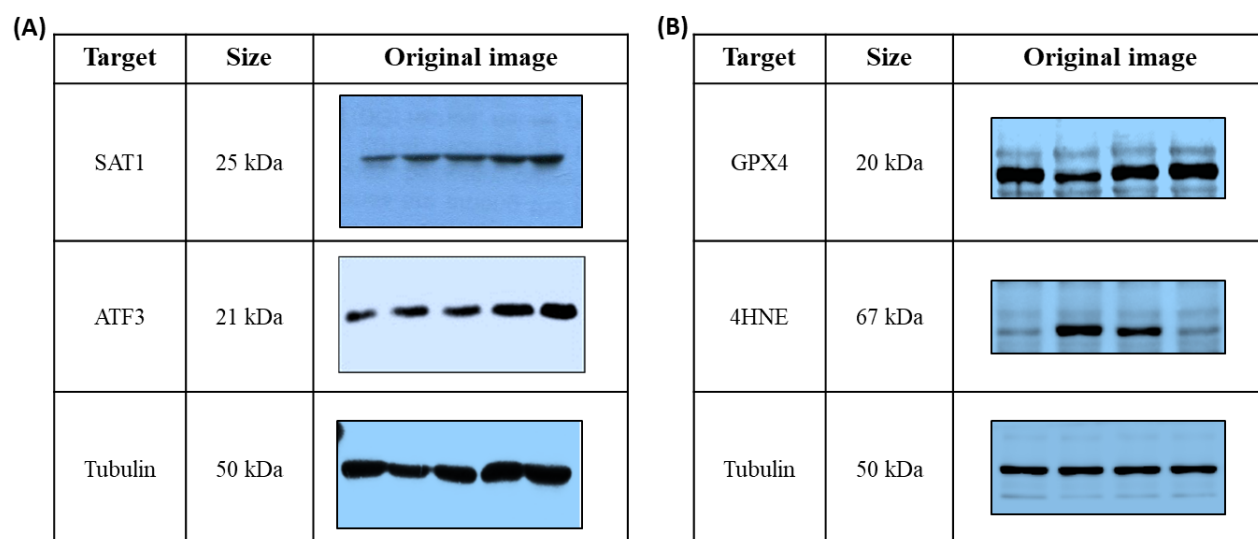





Figure S2. Original western blots in Figure 4. **(A)** Uncropped and unprocessed images of Figure 4C. **(B)** Original images of Figure 4E.

(A)

Target	Size	Original image
p-JNK	46, 54 kDa	
JNK	46, 54 kDa	
Tubulin	50 kDa	

(B)

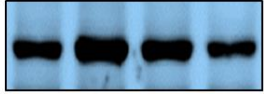

Target	Size	Original image
ATF3	21 kDa	
Tubulin	50 kDa	

Figure S3. Original western blots in Figure 6. **(A)** Uncropped and unprocessed images of Figure 6G. **(B)** Original images of Figure 6H.

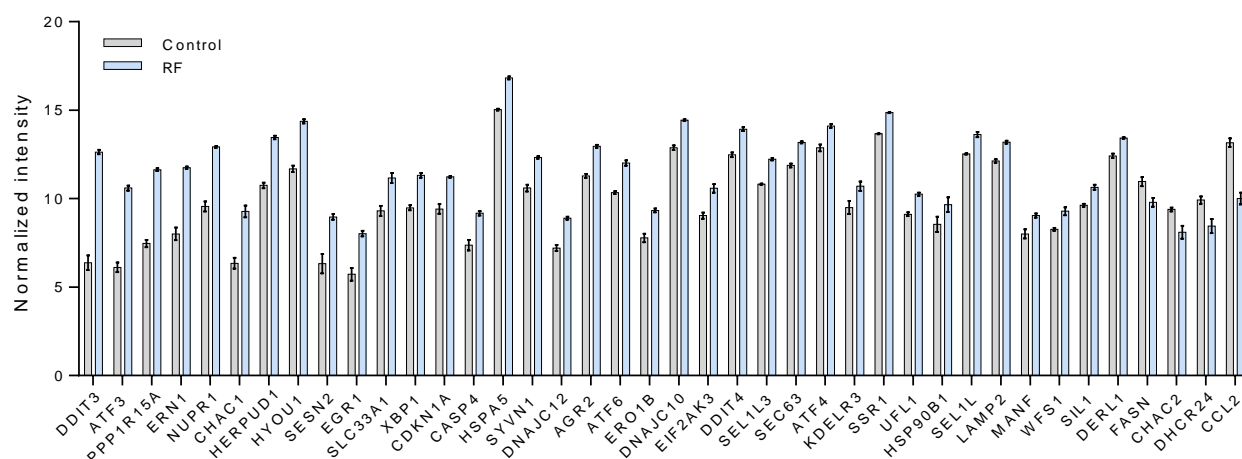


Figure S4. The changes in ER stress-related genes induced by RF treatment based on the microarray results. Microarray data were obtained from three independent experiments in A549 cells treated with RF. The data were represented as a bar graph, illustrating the normalized intensity.

Table S1. The list of ER stress-related genes changed by RF treatment in A549 cells

Gene	Full name	Log2 fold change	Gene	Full name	Log2 fold change
DDIT3	DNA-damage-inducible transcript 3	76.6	DNAJC10	DnaJ (Hsp40) homolog, subfamily C, member 10	2.9
ATF3	activating transcription factor 3	22.4	EIF2AK3	eukaryotic translation initiation factor 2-alpha kinase 3	2.9
PPP1R15A	protein phosphatase 1, regulatory subunit 15A	18.0	DDIT4	DNA damage inducible transcript 4	2.7
ERN1	endoplasmic reticulum to nucleus signaling 1	13.3	SEL1L3	sel-1 suppressor of lin-12-like 3 (C. elegans)	2.7
NUPR1	nuclear protein 1, transcriptional regulator	10.4	SEC63	SEC63 homolog, protein translocation regulator	2.5
CHAC1	ChaC glutathione-specific gamma-glutamylcyclotransferase 1	7.6	ATF4	activating transcription factor 4	2.4
HERPUD1	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	6.5	KDEL	(Lys-Asp-Glu-Leu)	2.3
HYOU1	hypoxia up-regulated 1	6.5	KDELRL3	endoplasmic reticulum protein retention receptor 3	2.3
SESN2	sestrin 2	6.2	SSR1	signal sequence receptor, alpha	2.3
EGR1	early growth response 1	4.9	UFL1	UFM1-specific ligase 1	2.2
SLC33A1	solute carrier family 33 (acetyl-CoA transporter), member 1	3.6	HSP90B1	Transcript Identified by AceView, Entrez Gene ID(s) 7184	2.2
XBP1	X-box binding protein 1	3.6	SEL1L	sel-1 suppressor of lin-12-like (C. elegans)	2.1
CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	3.5	LAMP2	lysosomal-associated membrane protein 2	2.1
CASP4	caspase 4	3.5	MANF	mesencephalic astrocyte-derived neurotrophic factor	2.1
HSPA5	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)	3.4	WFS1	Wolfram syndrome 1 (wolframin)	2.0
SYVN1	synovial apoptosis inhibitor 1, synoviolin	3.3	SIL1	SIL1 nucleotide exchange factor	2.0
DNAJC12	DnaJ (Hsp40) homolog, subfamily C, member 12	3.2	DERL1	derlin 1	2.0
AGR2	anterior gradient 2, protein disulphide isomerase family member	3.2	FASN	fatty acid synthase	-2.3
ATF6	activating transcription factor 6	3.2	CHAC2	ChaC, cation transport regulator homolog 2 (E. coli)	-2.4
ERO1B	endoplasmic reticulum oxidoreductase beta	2.9	DHCR24	24-dehydrocholesterol reductase	-2.8
			CCL2	chemokine (C-C motif) ligand 2	-8.9