

Supplementary Information

Garcinol attenuates lipoprotein(a)-induced oxidative stress and inflammatory cytokine production in ventricular cardiomyocyte through $\alpha 7$ -nicotinic acetylcholine receptor-mediated inhibition of the p38 MAPK and NF- κ B signaling pathways

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Running Title: Lipoprotein(a) medicates CAS through $\alpha 7$ -nAChR/p38MAPK signaling.

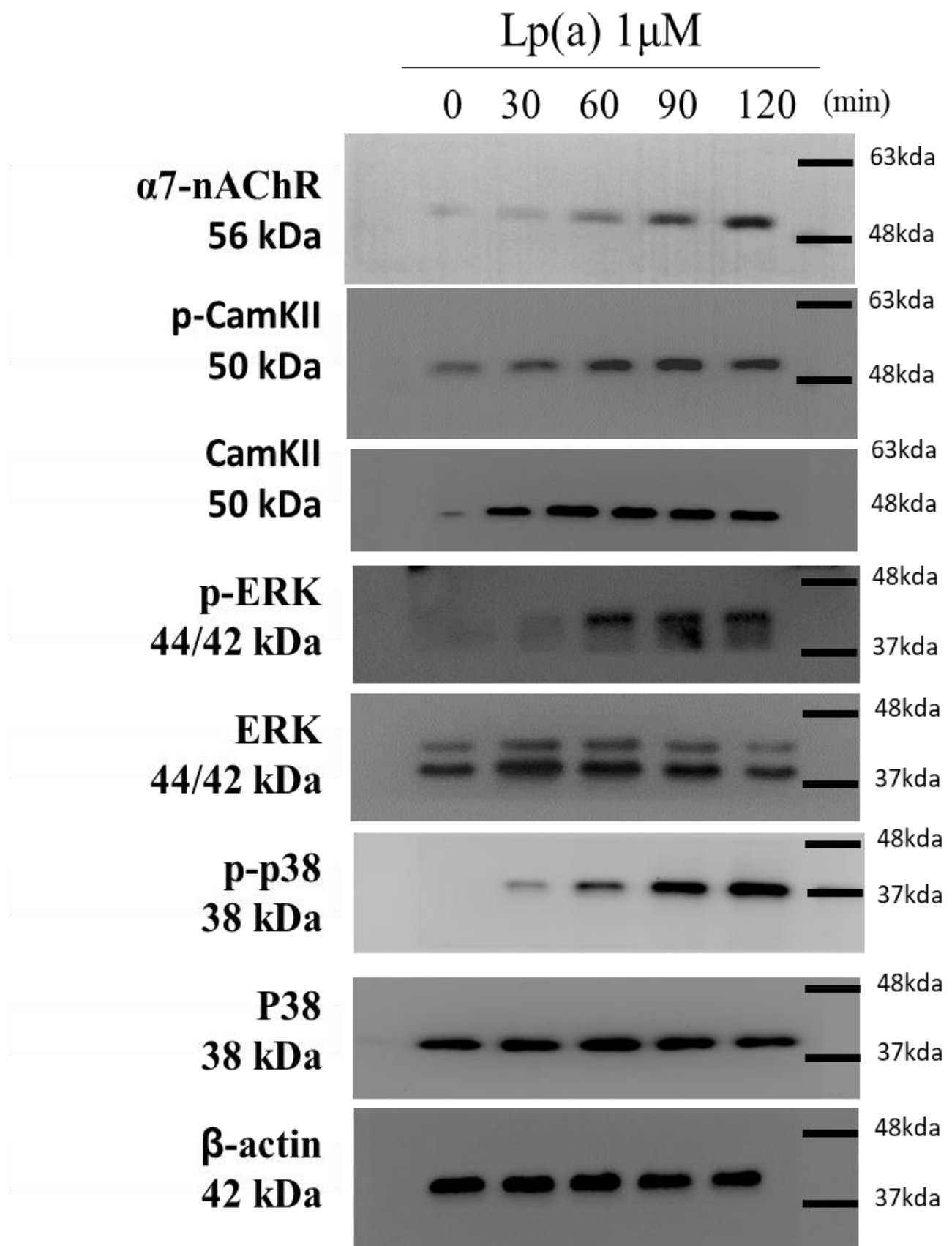
Supplementary Table S1. Primer sequence in this study

Gene		sequence
$\alpha 7$ -nAChR	forward	GCCAATGACTCGCAACCACTC
	reverse	CCAGCGTACATCGATGTAGCA
IL-6	forward	AGACAGCCACTCACCTCTTCAG
	reverse	TTCTGCCAGTGCCTCTTTGCTG
TNF- α	forward	CTCTTCTGCCTGCTGCACTTTG
	reverse	ATGGGCTACAGGCTTGTCCTC
CRP	forward	TCGACGCGTGGAAAGAG
	reverse	TAGAATCAGATTATCCTGAC
NF κ B	forward	GCAGCACTACTTCTTGACCACC
	reverse	TCTGCTCCTGAGCATTGACGTC

Supplementary Table S2. Western blot antibodies sheet.

No.	Target	Dilution		Source
1	α 7-nAChR	1:500	ab216485	abcam
2	CaMKII	1:1000	#50049	Cell signaling
3	p-CaMKII	1:1000	#12716	Cell signaling
4	Erk1/2	1:5000	#4695	Cell signaling
5	p-Erk1/2	1:5000	#4370	Cell signaling
6	p38 MAPK	1:1000	#8690	Cell signaling
7	p-p38 MAPK	1:1000	#4511	Cell signaling
8	GSK-3 β	1:2000	#12456	Cell signaling
9	p-GSK-3 β	1:2000	#5558	Cell signaling
10	IL-6	1:2000	ab6672	abcam
11	TNFA	1:5000	ab92324	abcam
12	CRP	1:5000	ab185558	abcam
13	NF-kB	1:1000	ab16502	abcam
14	IGF-IIR	1:1000	sc-136321	Santa Cruz
15	HSF1	1:1000	sc-17757	Santa Cruz
16	caspase-3	1:1000	sc-7272	Santa Cruz
17	VCAM-1	1:1000	#39036	Cell signaling
18	ICAM-1	1:1000	#4915	Cell signaling
19	E-Selectin	1:1000	sc-137054	Santa Cruz
20	p-MBS	1:1000	#3040	Cell signaling
21	t-MBS	1:1000	#2634	Cell signaling

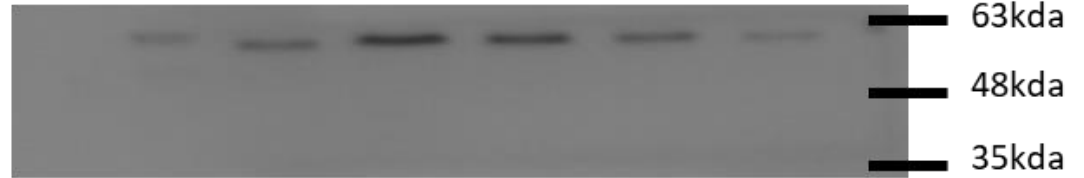
22	RhoA	1:1000	#2117	Cell signaling
23	RhoA-GTP	1:1000	#8820	Cell signaling
24	ROCK1	1:1000	#4035	Cell signaling
25	ROCK2	1:1000	#9029	Cell signaling
26	β -actin	1:10000	66009-1-Ig	PROTEINTECH



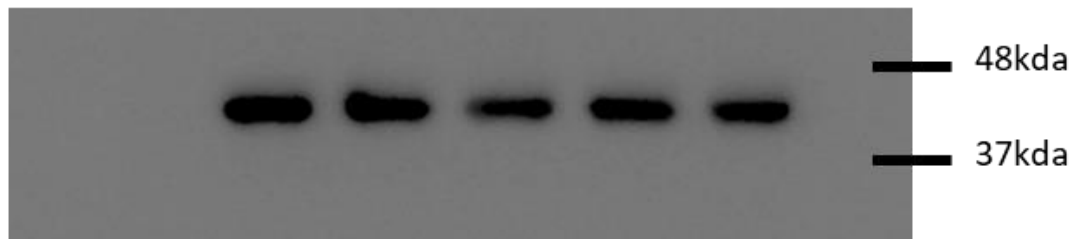
Supplementary Figure S1. Full-size blots of Figure 1F

Lp (a)	-	+	+	+	+
Garcinol	-	-	0.5	1	2.5

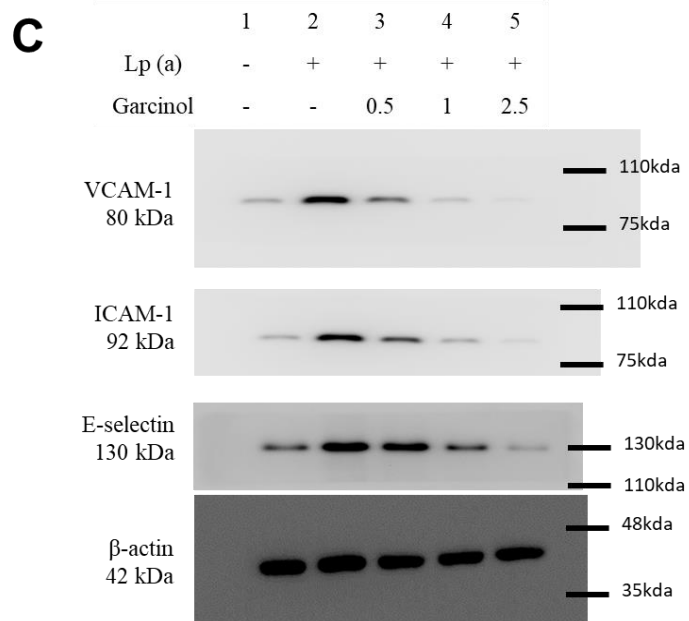
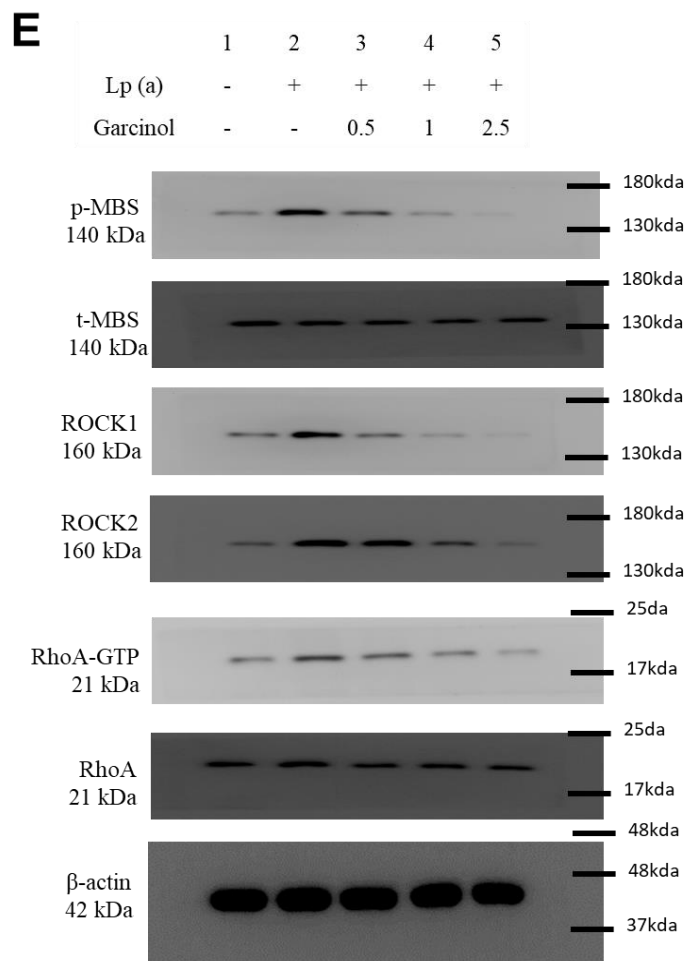
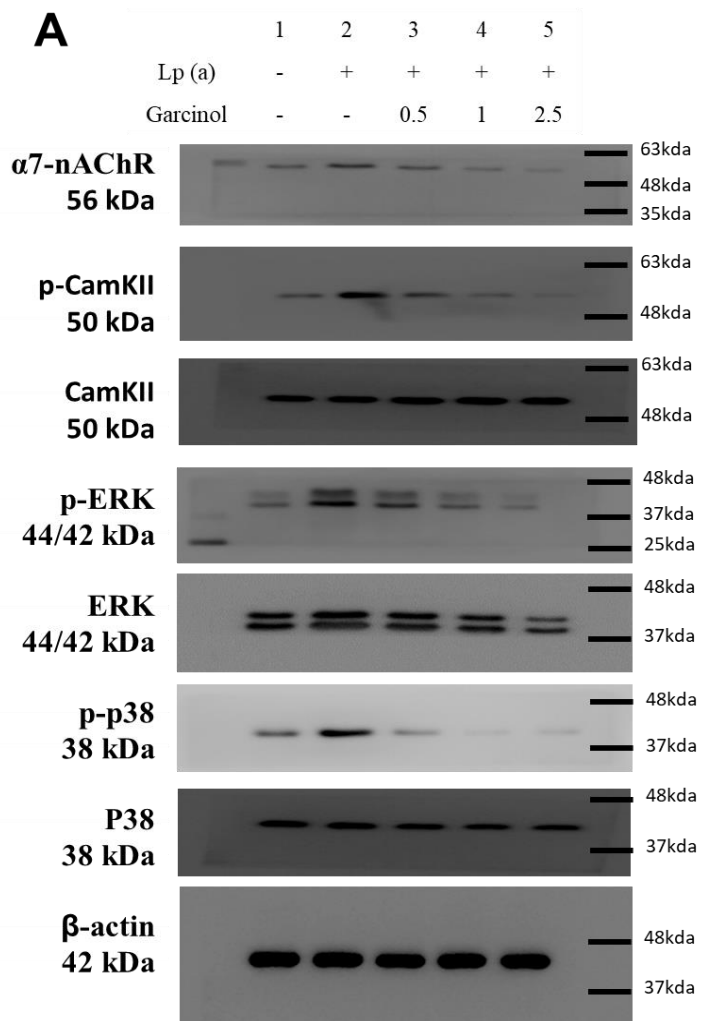
α 7-nAChR
56 kDa



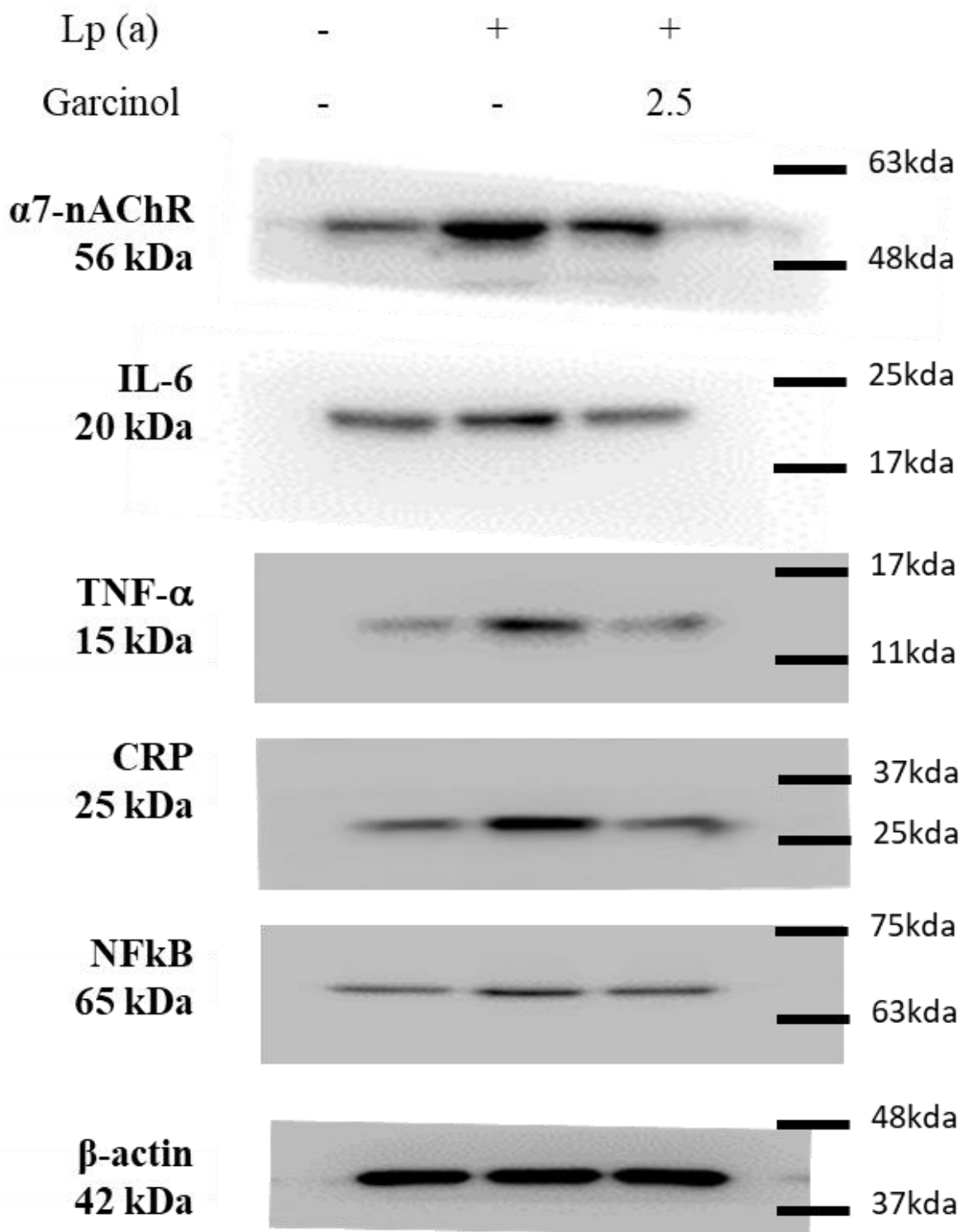
β -actin
42 kDa



Supplementary Figure S2. Full-size blots of Figure 2F

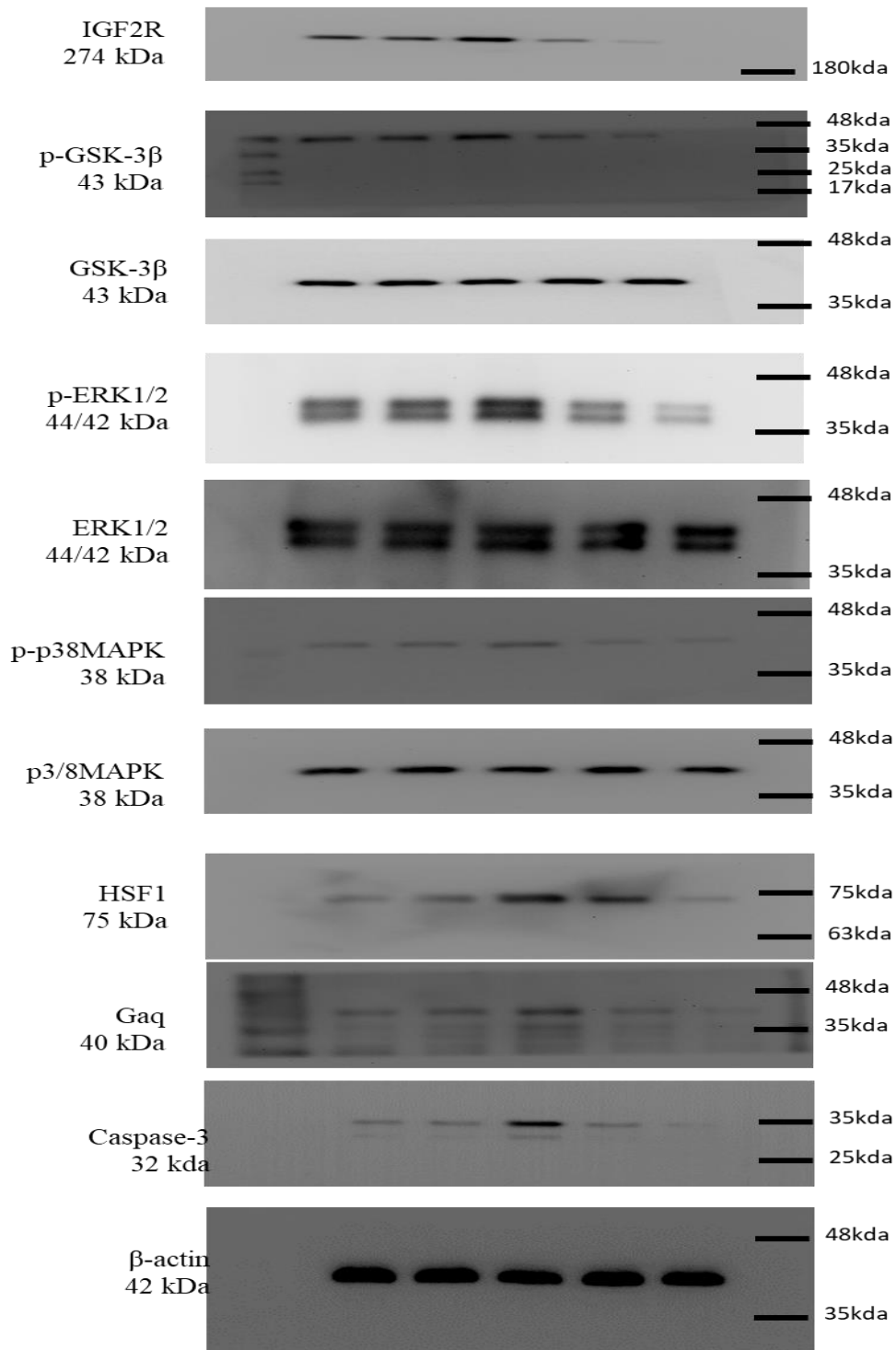


Supplementary Figure S3. Full-size blots of Figure 2A, 3C and 3E

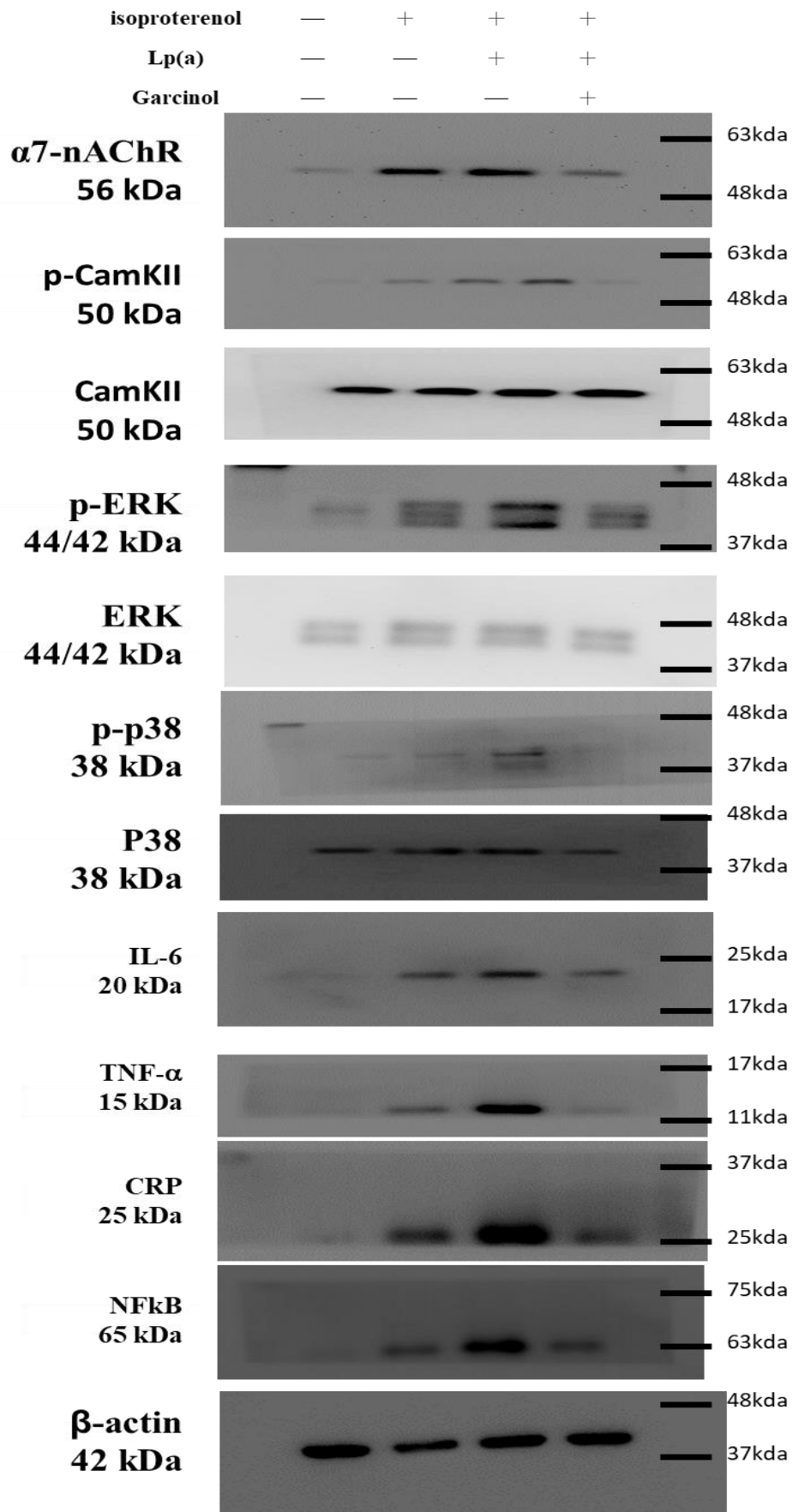


Supplementary Figure S4. Full-size blots of Figure 4B

Garcinol (2.5 μ M)	-	+	-	+	-
Lp (a)	-	-	+	+	+
SB203580	-	-	-	-	+



Supplementary Figure S5. Full-size blots of Figure 5A



Supplementary Figure S6. Full-size blots of Figure 6D