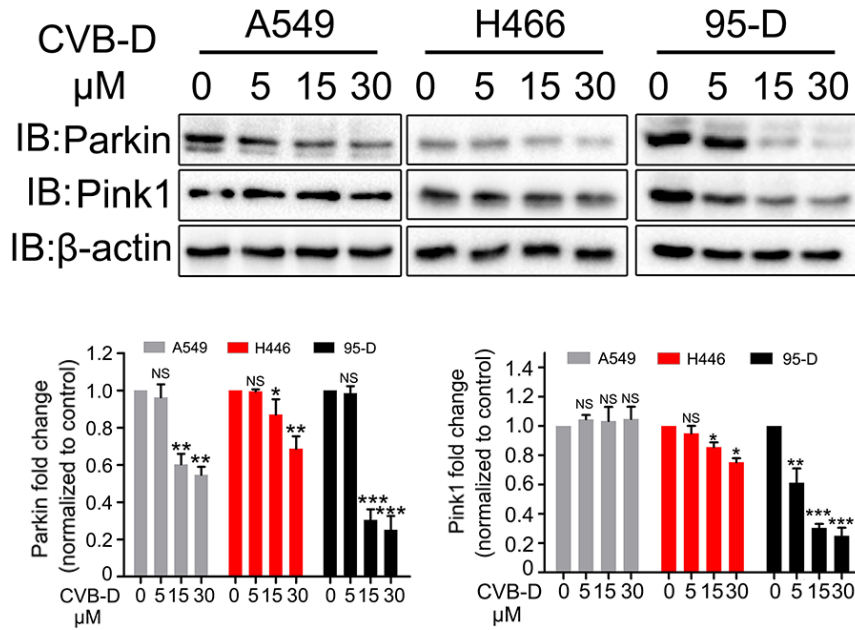


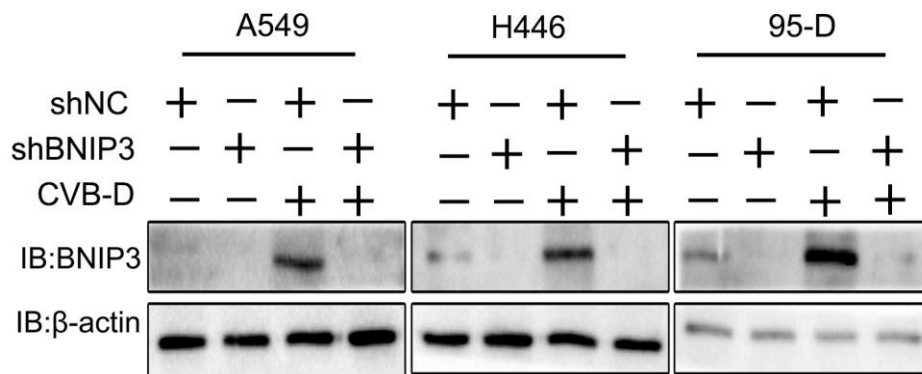
Table S1. Down-regulated mitochondria-related genes (CVB-D vs Ctrl)

Gene	Log2FC(CVB-D/Ctrl)	P-value	significant	regulate
1 MT-CO2	-2.963754763	0.0000514	yes	down
2 MTND6P3	-2.882140997	1.42E-56	yes	down
3 MFF	-2.811751669	0.000182861	yes	down
4 FIS1	-2.811751669	0.000182861	yes	down
5 TOMM70	-2.784784622	1.67E-10	yes	down
6 CKMT1B	-2.768287479	6.8E-19	yes	down
7 PMPCA	-2.750351125	0.000029	yes	down
8 AFM1	-2.683761747	1.48E-41	yes	down
9 MTCO1P12	-2.648252937	1.36E-13	yes	down
10 RMRP	-2.585643832	9.28E-45	yes	down
11 MSTO1	-2.561314244	0	yes	down
12 OXA1L	-2.499807663	0.00000832	yes	down
13 MTCO1P28	-2.485545454	1.45E-15	yes	down
14 MT-RNR2	-2.479211316	2.86E-41	yes	down
15 MT-CO3	-2.41121374	9.92E-09	yes	down
16 FMC1	-2.373630557	0.00000775	yes	down
17 ATP5F1P5	-2.271183288	0.00000699	yes	down
18 TOMM22	-2.247599356	2.63E-12	yes	down
19 IMMT	-2.19641552	7.15E-32	yes	down
20 ATP5A1	-2.150553583	3.61E-66	yes	down
21 ATPAF1	-2.138732992	1.99E-19	yes	down
22 MTCO3P12	-2.113826491	0.00000351	yes	down
23 ALDH2	-2.111311951	0.000000222	yes	down
24 LARS2	-2.077133946	4.16E-50	yes	down
25 MT-ND4	-2.036716963	2.53E-21	yes	down
26 MT-ND6	-2.015341433	1.43E-60	yes	down
27 VARS2	-1.959359649	1.84E-98	yes	down
28 CKMT1A	-1.949255193	0.0000454	yes	down
29 ATP5G1	-1.880233701	2.96E-166	yes	down
30 MTCO2P12	-1.870379399	2.7E-72	yes	down
31 MTND4P20	-1.835999216	7.19E-09	yes	down
32 MTG1	-1.766785403	4.3E-11	yes	down
33 ATP5B	-1.686220787	0.000222072	yes	down
34 MTCO3P39	-1.641826668	0.0000664	yes	down
35 MGME1	-1.596900797	4.62E-13	yes	down
36 MRPL50	-1.584341173	0.0000828	yes	down
37 MTCO1P22	-1.547776465	1.11E-31	yes	down
38 MRPS31P5	-1.534110274	0.00013835	yes	down
39 MCCD1P1	-1.48089045	7.54E-50	yes	down
40 NADK2	-1.443413109	1.21E-31	yes	down
41 MRPS14	-1.419434247	1.41E-55	yes	down
42 MPC1	-1.37598399	1.61E-25	yes	down
43 MTFR1L	-1.363267841	2.96E-11	yes	down
44 MRPL38	-1.342960908	2.48E-12	yes	down
45 MT-TS1	-1.323300145	0.000029	yes	down
46 MT-ATP6	-1.267927863	2.4E-16	yes	down
47 MRPL11	-1.255358321	0.000231086	yes	down
48 MT-CO1	-1.225122276	9.24E-12	yes	down
49 MECR	-1.202541622	0.000128716	yes	down
50 VDAC1	-1.169265467	2.39E-32	yes	down
51 MRPL12	-1.155762804	1.59E-08	yes	down
52 GTPBP3	-1.135444331	5.94E-25	yes	down
53 MRPS7	-1.126888236	7.63E-08	yes	down
54 TIMM10	-1.098781556	0.00000494	yes	down
55 MPV17L	-1.084770164	1.01E-25	yes	down
56 MTERF4	-1.056864167	6.99E-08	yes	down
57 METAP1D	-1.039330537	1.48E-10	yes	down
58 MICU3	-1.030208227	0.00000529	yes	down
59 MRPL28	-1.014762015	9.25E-68	yes	down
60 MRPL58	-0.994785295	1.98E-08	yes	down
61 TOMM40	-0.983363047	7.5E-27	yes	down
62 MRPS9	-0.982802349	0.000000113	yes	down
63 MTF2	-0.979328483	0.00014144	yes	down
64 ATP5C1	-0.96085164	2.99E-10	yes	down
65 MRPS28	-0.956141579	5.16E-11	yes	down
66 TIMM8B	-0.942996203	3.09E-14	yes	down
67 MIPEP	-0.934205035	1.42E-44	yes	down
68 NARS2	-0.930898935	2.24E-10	yes	down
69 TIMM29	-0.922455134	6.94E-11	yes	down
70 MTERF2	-0.919517723	4.33E-25	yes	down
71 TIMM23	-0.914489775	2.62E-17	yes	down
72 SARS2	-0.91377152	1.62E-23	yes	down
73 ATP5O	-0.901383771	6.6E-09	yes	down
74 MRPL41	-0.88688871	1.53E-16	yes	down
75 MRPL40	-0.876291921	2.61E-09	yes	down
76 OPA3	-0.867723964	7.42E-13	yes	down
77 PCK2	-0.853377215	1.73E-18	yes	down
78 COX4I1	-0.827404934	7.76E-14	yes	down
79 CLUHP3	-0.821107481	4.33E-12	yes	down
80 PARS2	-0.672588922	0.000122244	yes	down
81 TOMM20	-0.661148943	5.27E-10	yes	down
82 IDH2	-0.616441349	2.12E-19	yes	down
83 AFM2	-0.615068995	1.05E-41	yes	down

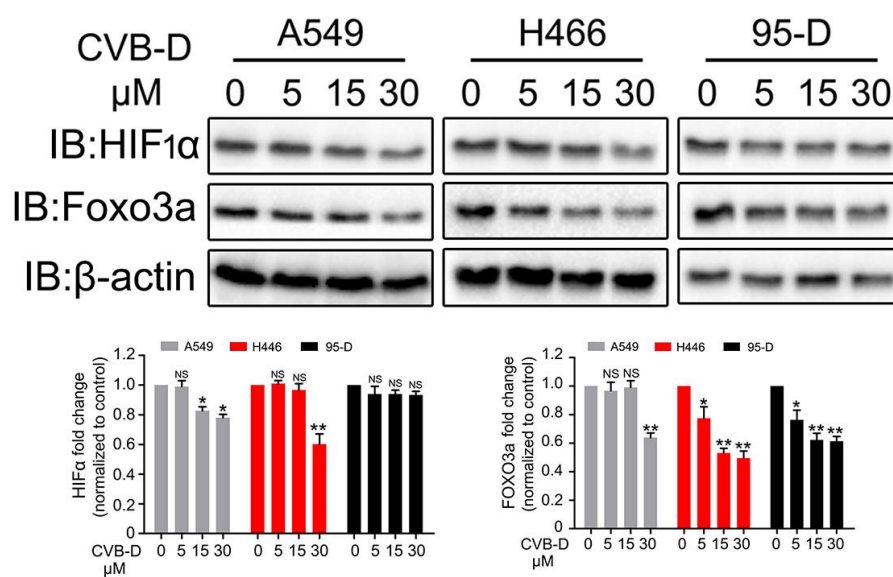
**Table S1.** Total down-regulated mitochondria-related genes upon CVB-D treatment in A549 cells was shown. The genes expression was compared between control and 30  $\mu$ M CVB-D treated cells by transcriptome analysis. The mitochondria-related genes down-regulated upon CVB-D treatment was shown.



**Figure S1.** Immunoblotting analysis of Parkin and Pink1 expression upon CVB-D treatment in lung cancer cells. The expression of Parkin and Pink1 in lung cancer cells treated with or without 30  $\mu$ M CVB-D for 24 h was detected by immunoblotting. Beta-actin was used as loading control.



**Figure S2.** Immunoblotting analysis of BNIP3 expression upon CVB-D treatment in lung cancer cells. Western blotting analysis was performed to detect the expression of BNIP3 in shBNIP3 or shNC lung cancer cells treated with or without 30  $\mu$ M CVB-D for 24 h. Beta-actin was used as loading control.



**Figure S3.** Immunoblotting analysis of HIF1α and FOXO3a expression upon CVB-D treatment in lung cancer cells. The expression of HIF1α and Foxo3a in lung cancer cells treated with or without 30 μM CVB-D for 24 h was detected by immunoblotting. Beta-actin was used as loading control.