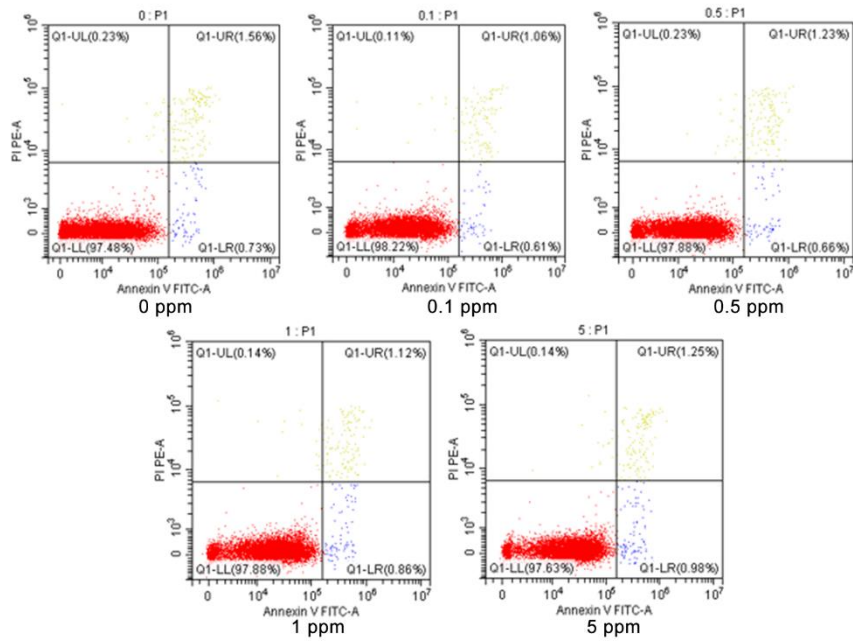


Supplementary Table 1. RT-qPCR primers applied in this study

Genes	Primer sequences
TNFα	Forward: 5'- GGATCTCAAAGACAACCAAC -3' Reverse: 5'- ACAGAGCAATGACTCCAAAG -3'
IFNγ	Forward: 5'- GTGTCATCGAATCGCACCTG -3' Reverse: 5'- GTTCACCTCGAACTTGGCGA -3'
IL1β	Forward: 5'- TCTGTGACTCGTGGGATGAT -3' Reverse: 5'- CTTCTTTGGGTATTGTTTGG -3'
IL6	Forward: 5'- TGATGGATGCTTCCAAACTG -3' Reverse: 5'- GAGCATTGGAAGTTGGGGTA -3'
IL10	Forward: 5'- TCCGGGGTGACAATAACTGC -3' Reverse: 5'- TGGCCTTGTAGACACCTTTGT -3'
IL-1Ra	Forward: 5'- GACCTTCTACCTGAGGAACAACCAG -3' Reverse: 5'- AAGAACACATTCCGAAAGTCAATAGG -3'
TGFβ1	Forward: 5'- GGAAATCAATGGGATCAGTC -3' Reverse: 5'- CTGAAGCAGTAGTTGGTATC -3'
TGFβ3	Forward: 5'- GTTTACCAAGCCAAAGTCC -3' Reverse: 5'- GGTGTCTAGCCAAATGTCC -3'
OPG	Forward: 5'- AAGGAAATGCAACACATGAC -3' Reverse: 5'- TCTCTACACTCTCTGCATTC -3'
RANKL	Forward: 5'- CTCATGCAGGAGAATCAAAC -3' Reverse: 5'- TTCCATCATAGCTGGAAGTC -3'
RANK	Forward: 5'- AAAACGCTGACAGCTAATC -3' Reverse: 5'- AGTCTTCTGGAACCATCTTC -3'
TRAF6	Forward: 5'- GCCCATGCCGTATGAAGAGA -3' Reverse: 5'- ACTGAATGTGCAGGGGACTG -3'
NF-κB	Forward: 5'- AACACTGCCGAGCTCAAGAT -3' Reverse: 5'- CATCGGCTTGAGAAAAGGAG -3'
IκB	Forward: 5'- CCTCACCCCTCCCAATAAT -3' Reverse: 5'- GTGTGAATGGTGCCTGTGAC -3'
JNK	Forward: 5'- CAAGGAGGTCATGGATTTGG -3' Reverse: 5'- AAGACGACGGATGCTGAGAG -3'
OSM	Forward: 5'- GAGAACACTGCTTAGTTTGG -3' Reverse: 5'- AGGTTTTGGTGGAGGATATAG -3'
STAT3	Forward: 5'- GATTCATTGATGCAGTTTGG -3' Reverse: 5'- GGTGTCTCAGTCATACTCTG -3'
OPN	Forward: 5'- CCAAGCGTGGAAACACACAGCC -3' Reverse: 5'- GGCTTTGGAAGTCGCCTGACTG -3'
OCN	Forward: 5'- ACCCTCTCTGCTCACTCTGC -3' Reverse: 5'- TATTCACCACCTTACTGCCCTCC -3'
BSP	Forward: 5'- AAGCATGCCTACTTTTATCC -3' Reverse: 5'- CTTCAATTTGAAGTCTCCTCTTC -3'
ALP	Forward: 5'- ATGTCTGGAACCGCACTGAAC -3' Reverse: 5'- AGCCTTTGGGATTCTTTGTGTCAG -3'

RUNX2	Forward: 5'- CAGTATGAGAGTAGGTGTCCCGC -3' Reverse: 5'- AAGAGGGGTAAGACTGGTCATAGG -3'
BMP2	Forward: 5'- ATGGGTTTGTGGTGGAAAGTG -3' Reverse: 5'- AGTTCAGGTGATCAGCCAGG -3'
BMP6	Forward: 5'- AAAAGGAGATCCTGTCCG -3' Reverse: 5'- AGAGATCCAGCATGAAGAG -3'
COL1A1	Forward: 5'- CCCCAAGGAGAAGAAGCATG -3' Reverse: 5'- GAATCGACTGTTGCCTTCGC -3'
Wnt5a	Forward: 5'- CTTCCAAGTTCTTCTAATGG -3' Reverse: 5'- TTAGGGACCACCAAGAATTAG -3'
Wnt3a	Forward: 5'- AACACAGCAGCTTAATGAC -3' Reverse: 5'- ATCTCCACGTAGTTCCTG -3'
Wnt10b	Forward: 5'- GTAATCACGACATGGACTTTG -3' Reverse: 5'- CTCCAACAGGTCTTGAATTG -3'
Axin2	Forward: 5'- GAATACGAAAGGCACAGAAC -3' Reverse: 5'- CTTATGCTTTGGGTAATATGG -3'
β-catenin	Forward: 5'- CATTGGTGCCAGGGAGAAG -3' Reverse: 5'- CCACCCATCTCATGCTCCATC -3'
VEGFA	Forward: 5'- CAATGATGAAGCCCTGGAGTG -3' Reverse: 5'- GCTCATCTCTCCTATGTGCTGG -3'
PDGFa	Forward: 5'- CGACTCTTGGAGATAGACTC -3' Reverse: 5'- CTTCTCAATACTTCTCTTCC -3'
PDGFb	Forward: 5'- AGATCTCGCGGAACCTCATC -3' Reverse: 5'- AGGGTCACTGTGGCCTTCTT -3'
MMP9	Forward: 5'- TACTTTGGAAACGCAAATGG -3' Reverse: 5'- GTGTAGAGATTCTCACTGGG -3'
CD31	Forward: 5'- GATCTCCATCCTGTCCGGTAAC -3' Reverse: 5'- GTGTCATTCACGGTTTCTTCGT -3'
eNOS	Forward: 5'- CAAGACCGATTACACGACATTGAGA -3' Reverse: 5'- TGAGGACTTGTCCAAACACTCCAC -3'
Ang-1	Forward: 5'- TAACCTCGCCCTGCAAAGAG -3' Reverse: 5'- CTGTATGCTTGCAGGTGGTGAT -3'
α-SMA	Forward: 5'- CAACCCCTATACAACCATCACAC -3' Reverse: 5'- CCCAAACTGCTTGCCTAACC -3'
GAPDH	Forward: 5'- TCAGCAATGCCTCCTGCAC -3' Reverse: 5'- TCTGGGTGGCAGTGATGGC -3'



Supplementary Figure1. Cellular toxicity of Cobalt on PBMCs. Flow cytometry illustrates the apoptosis of PBMCs at different concentrations of CoCl_2 (0, 0.1, 0.5, 1, or 5 ppm) after the cobalt stimulation for 2 days.