

MTT test

Nano Silver Solution 1000 ppm diluted to 5 ppm & 50 ppm

Sample Received:20181214

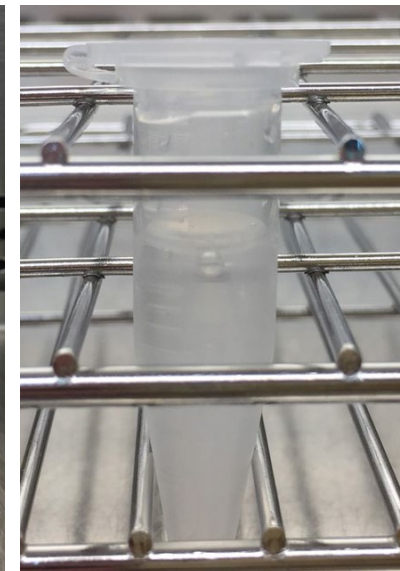
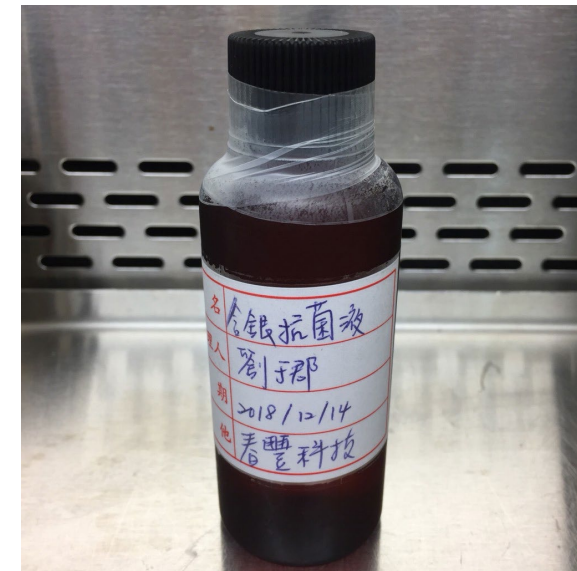
Applicant: SPRING BLESS TECHNOLOGY Co., Ltd.

Evaluated By: Industrial Technology Research Institute.

Experimental design

- Cells : CCD966SK-20181207 .p20
- Cell density : 1.0×10^4 /well -96 well-plate,4wells/sample
- Negative control: Medium (MEM-10%)
- Positive control : 0.45%Lysol

Sample Name	Sample Condition	Evaluated Item	Date of Testing	Concentration	Remark
Nano Silver Solution 5ppm	Transparent liquid	MTT	2018/12/19	5 ppm	Stock solution conc.=1000ppm
Nano Silver Solution 50ppm	Transparent liquid	MTT	2018/12/19	50 ppm	Stock solution conc.=1000ppm

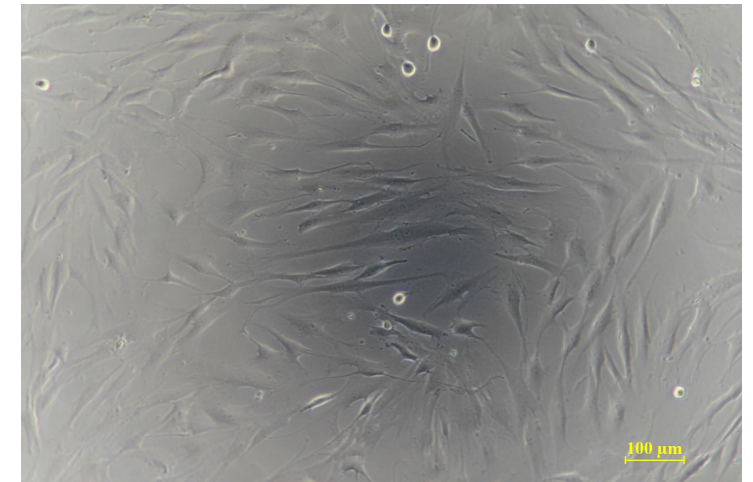
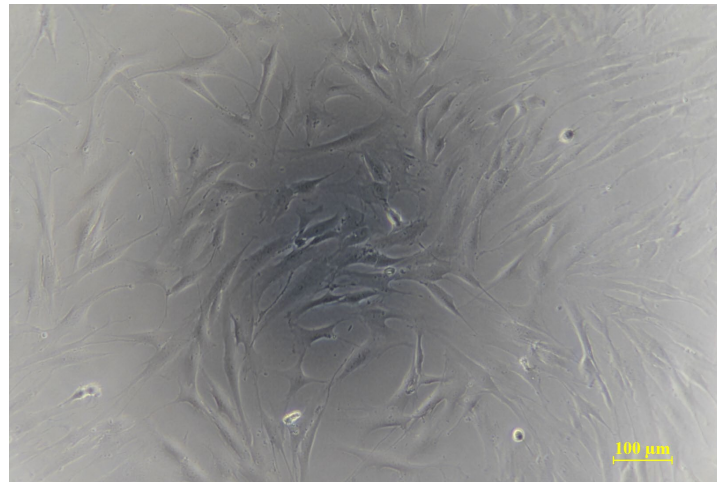
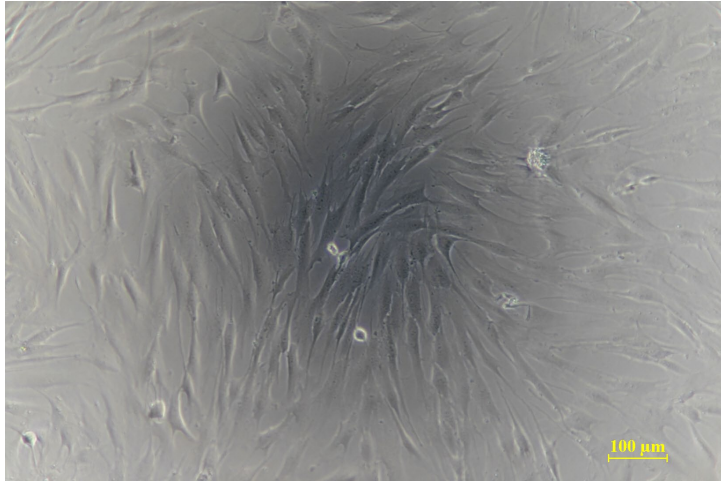


Negative control (M)

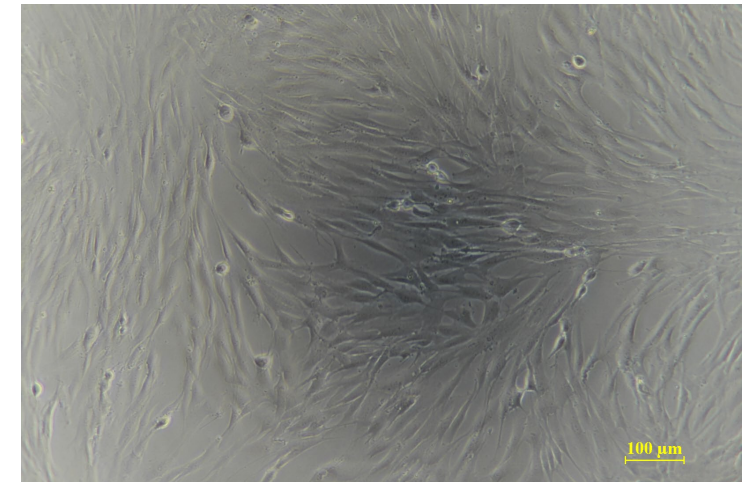
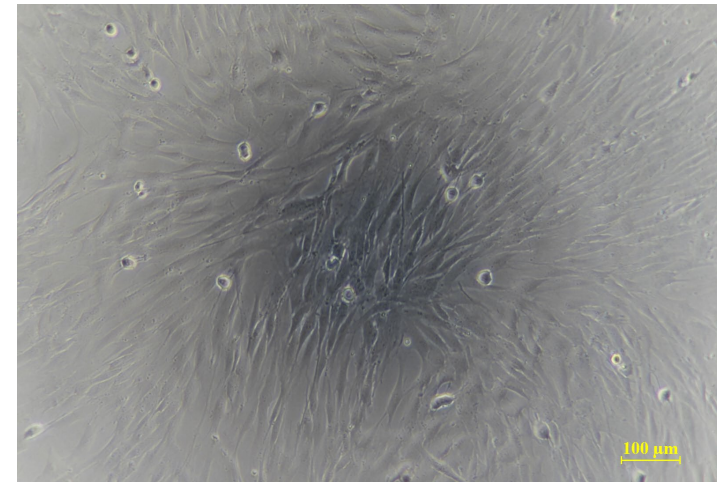
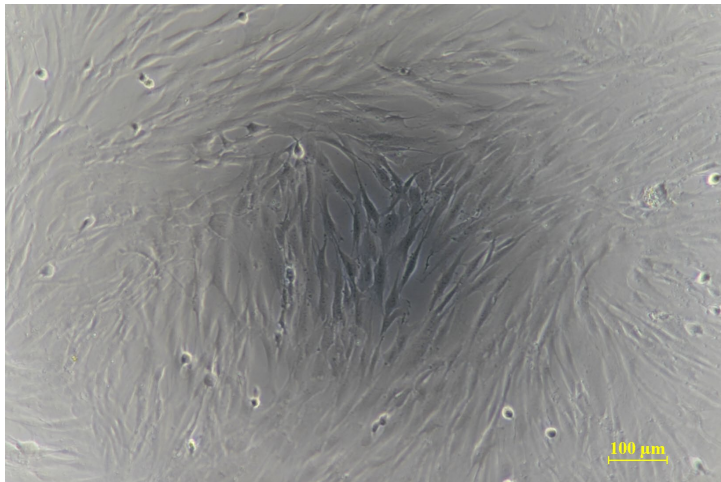
Nano Silver Solution
5ppm

Nano Silver Solution
50ppm

Before adding
samples



Adding samples after
24 hrs

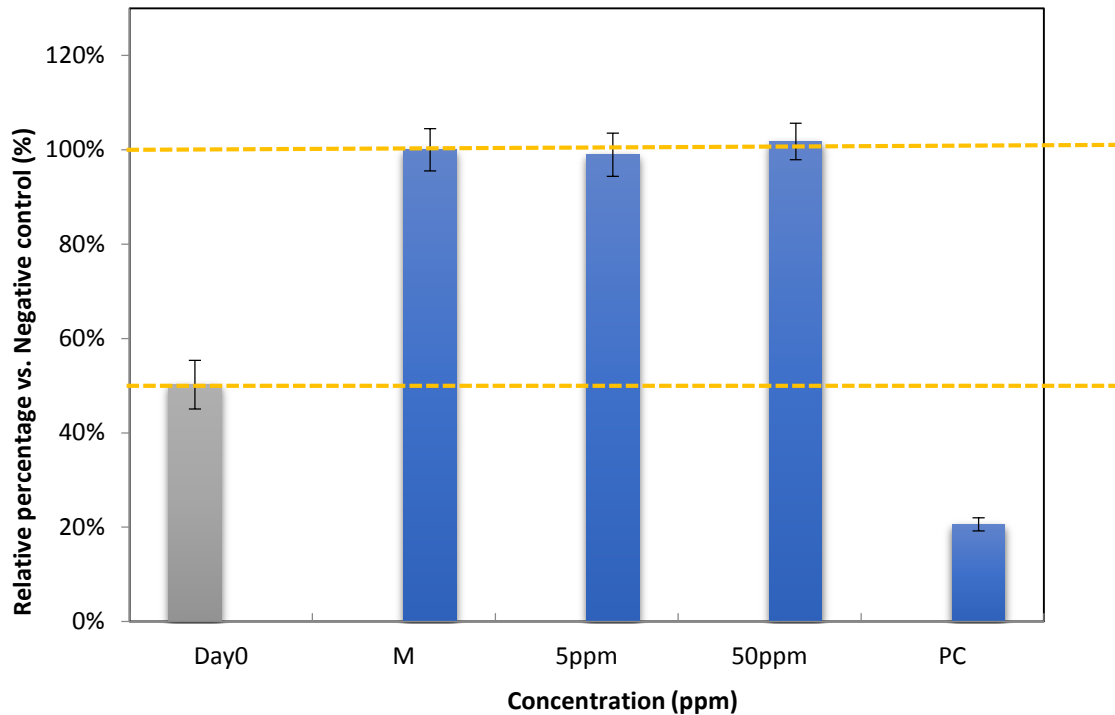


- Cell morphology of medium and samples(Before and after adding samples)
- Both cell amount and cell morphology are normal after adding samples of Nano Silver Solution 5 ppm & 50 ppm .

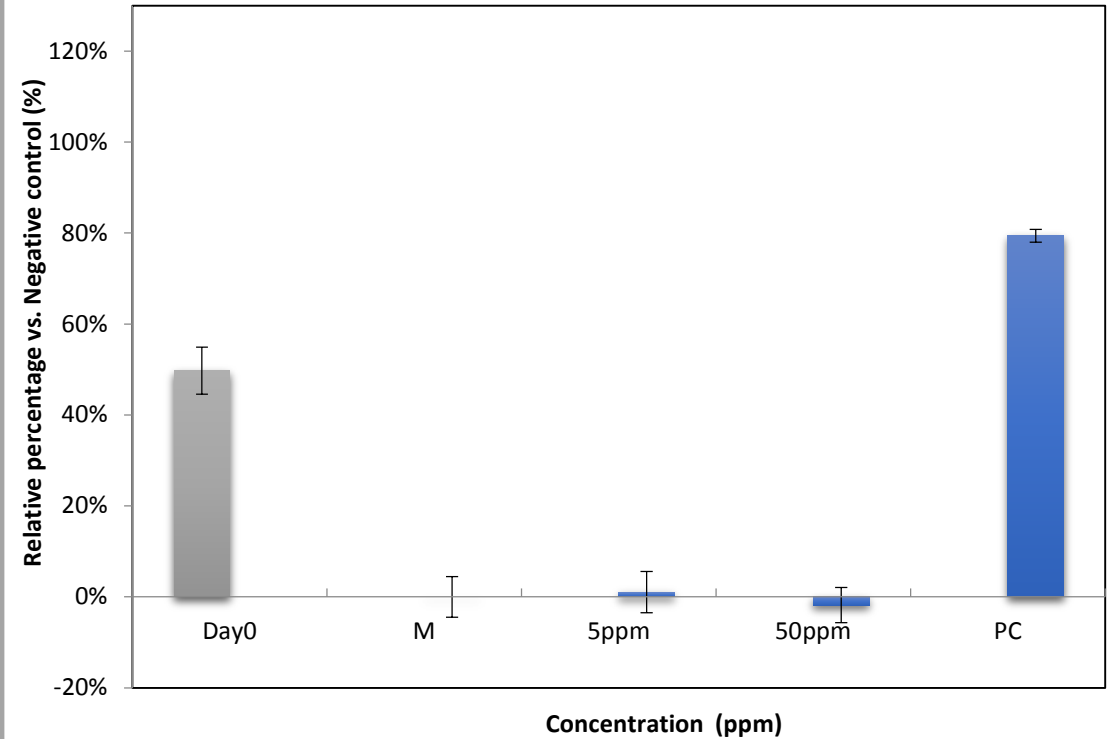
	%(mean)	%(se)	1-%(mean)
Day 0	50.24%	5.16%	49.76%
NC(M))	100.00%	4.49%	0.00%
Nano Silver Solution 5ppm	98.95%	4.56%	1.05%
Nano Silver Solution 50ppm	101.79%	3.86%	-1.79%
PC	20.59%	1.40%	79.41%

***When Nano Silver Solution ≤ 50 ppm , no cytotoxicity was found** (Non cytotoxicity : Cell viability > 50.24%(Day 0))

Cells viability



Cells growth inhibition



➤ **When Nano Silver Solution 1000ppm diluted to 5ppm&50ppm, cell growth rate are normal**