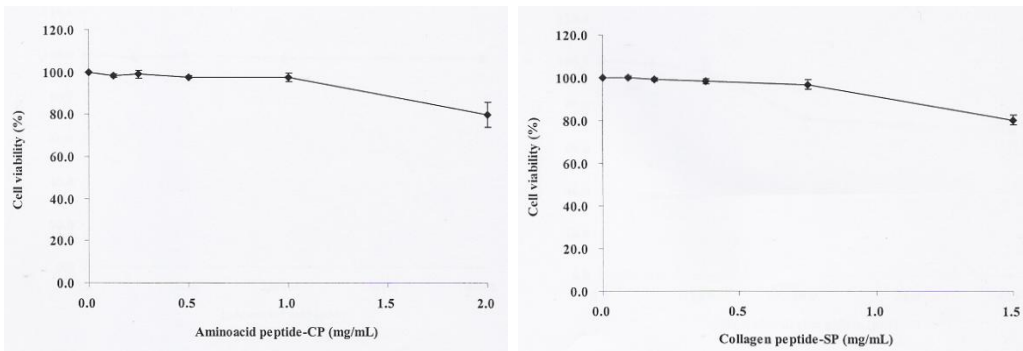


Safety and Efficacy of Collagen

#. Sample : Amino acid peptide-CP, Collagen peptide-SP

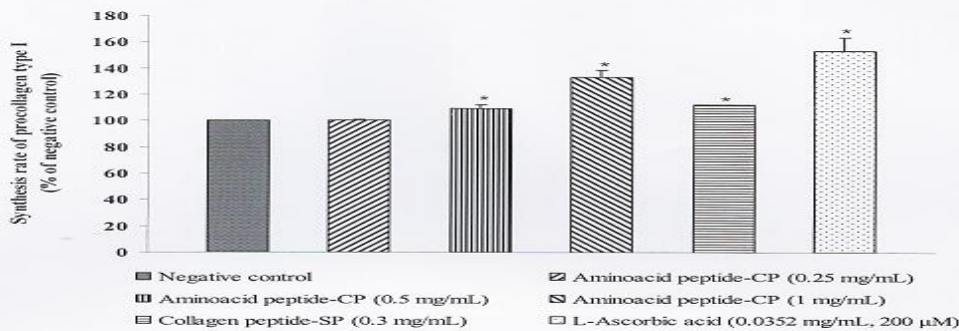
Effects on cell viability in normal human dermal fibroblasts



*Result (cell viability)

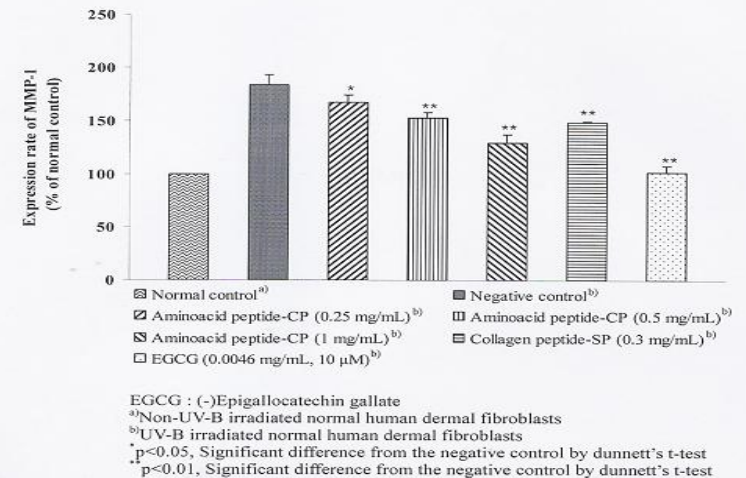
1. Amino acid peptide-CP: 1.3mg/mL (91.8%),
2. Collagen peptide-SP: 0.78mg/mL(92.4%)

Effects on synthesis rate of procollagen type I in normal human dermal fibroblasts



* p<0.05, Significant difference from the negative control by mann-whitney u-test

Effects on expression rate of MMP-1 in normal human dermal fibroblasts



*Result (Expression rate of MMP-1)

1. Amino acid peptide-CP : 0.25mg/mL →167.3±6.6%,
0.5mg/mL →152.9±5.2%, 1mg/mL →129.1±8.1%
2. Collagen peptide-SP : 0.3mg/mL →148.6±0.9%

*Result(Synthesis rate of procollagen type I

1. Amino acid peptide-CP : 0.25mg/mL →100.1±0.6%,
0.5mg/mL →109.2±2.7%, 1mg/mL →133.0±5.7%
2. Collagen peptide-SP : 0.3mg/mL →112.3±0.2%,