

## N-Acetylation of silk fibroin peptide

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### Abstract

In this study, we have performed N-acetylation reaction using enzymatically hydrolyzed fibroin peptide treated by hydrolysis enzyme papain at silk fibroin protein. Reaction results were identified through UV-Vis spectrum and PDA chromatogram for C<sub>18</sub> column. The compositions of N-acetylated peptide were identified using Liquid Chromatography/Electrospray Ionization Mass Spectrometry. Also, we were proceeded reaction for various conditions to confirmed optimum reaction condition of N-acetylated peptide. The conversion rate(%) of each amino acid composition of fibroin peptide and water soluble fraction and water insoluble fraction were identified by mass shift using LC/ESI/MS spectrometry. To examine physical property of N-acetylated peptide we have investigated that conductivity per concentration compared with those of the silk peptide. also, we have investigated solubility for each solvent (water, methanol, ethanol, propanol, butanol, pentanol, octanol).

### References

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