

## Supplementary Information

### **Design and development of caffeic acid conjugated with Bombyx mori derived peptide biomaterials for anti-aging skin care applications**

Hoomin Lee,<sup>†a</sup> A. T. Ezhil Villian,<sup>†b</sup> Jun Yeong Kim,<sup>†c</sup> Myeung Hwan Chun,<sup>d</sup> Jung Sang Suh,<sup>d</sup> Hyo Hyun Seo,<sup>c</sup> Seung Hee Cho,<sup>c</sup> Il Soo Shin,<sup>e</sup> Sung Jun Kim,<sup>e</sup> Seok Hoon Park,<sup>f</sup> Young-Kyu Han,<sup>\*b</sup> Jeong Hun Lee,<sup>\*c</sup> and Yun Suk Huh<sup>\*a</sup>

<sup>a</sup>Department of Biological Engineering, Biohybrid Systems Research Center (BSRC), Inha University, Incheon 22212, Republic of Korea.

<sup>b</sup>Department of Energy and Materials Engineering, Dongguk University-Seoul, Seoul 04620, Republic of Korea.

<sup>c</sup>Anti-aging Research Institute of BIO-FD&C Co. Ltd., Incheon 22212, Republic of Korea

<sup>d</sup>Department of Chemistry, Seoul National University, Seoul, 151-747, Republic of Korea

<sup>e</sup>Research Institute of Charming Cosmetics Co. Ltd. Incheon 22212, Republic of Korea

<sup>f</sup>Department of Environmental Engineering, Anyang University, Anyang-si, 430-714, Republic of Korea

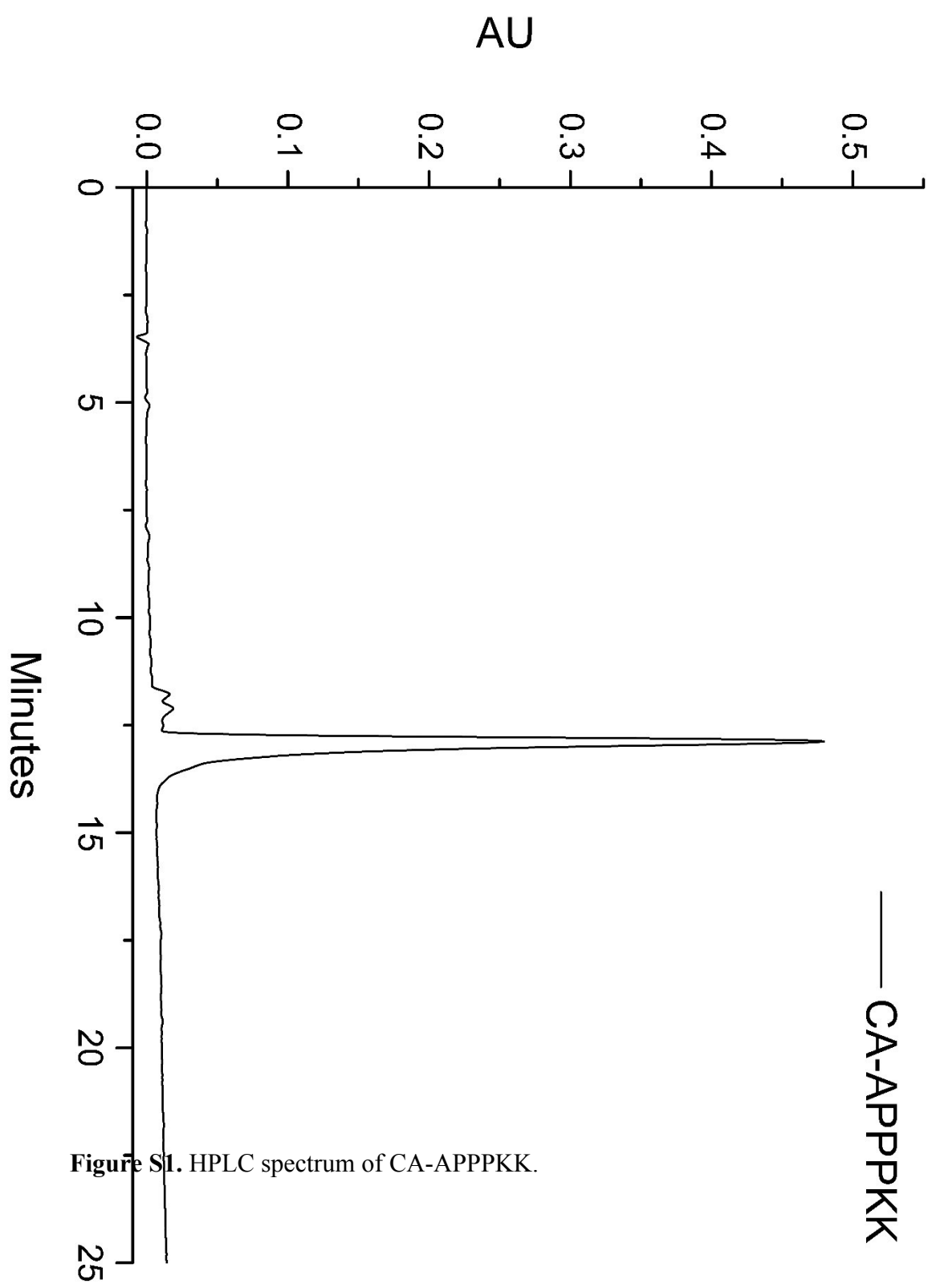


Figure S1. HPLC spectrum of CA-APPPKK.