



Figure S1. E-AGSE aqueous solutions after 3 months at (from left to right) light, -18 °C, 4 °C, 25 °C, 40 °C, and 48 °C.

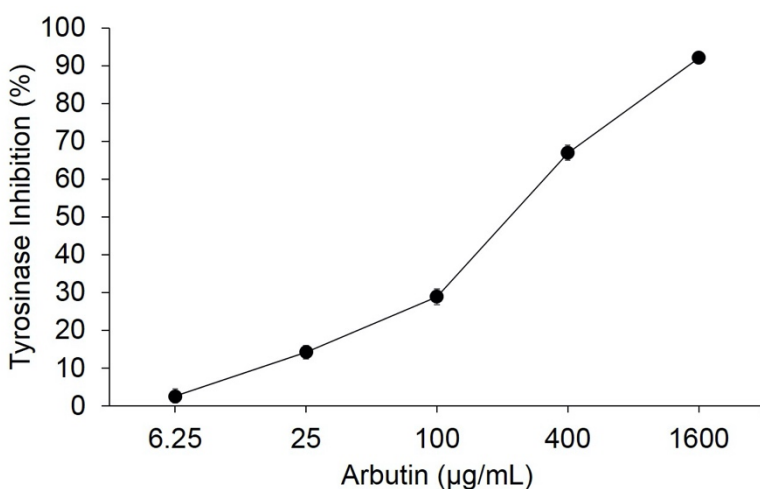
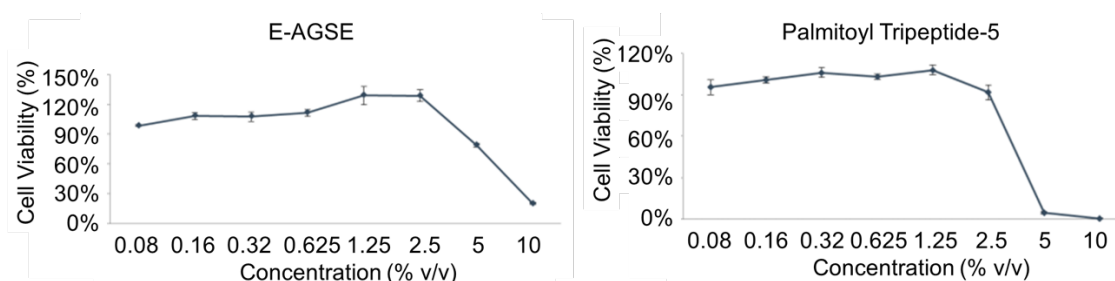
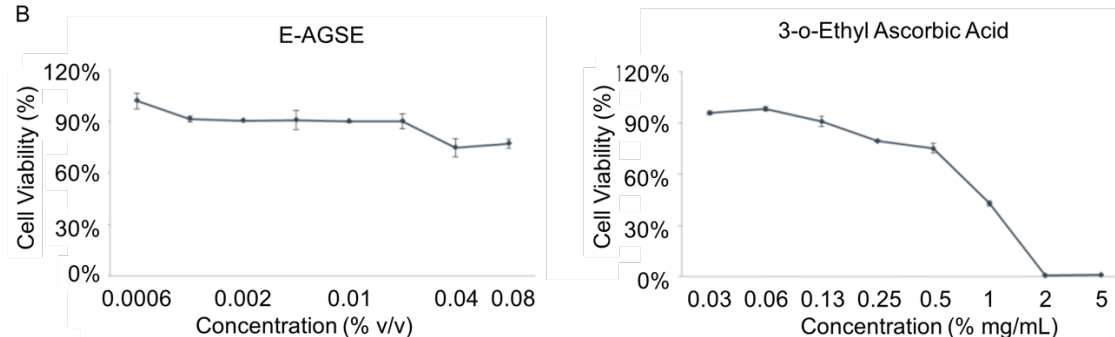


Figure S2. Arbutin control in tyrosinase enzyme activity assay. Mushroom tyrosinase enzymatic activity was evaluated using **an** L-DOPA substrate and activity was monitored as dopachrome formation via optical density (475 nm). The data represent the mean \pm SD of cumulative data from three independent experiments.

A



B



C

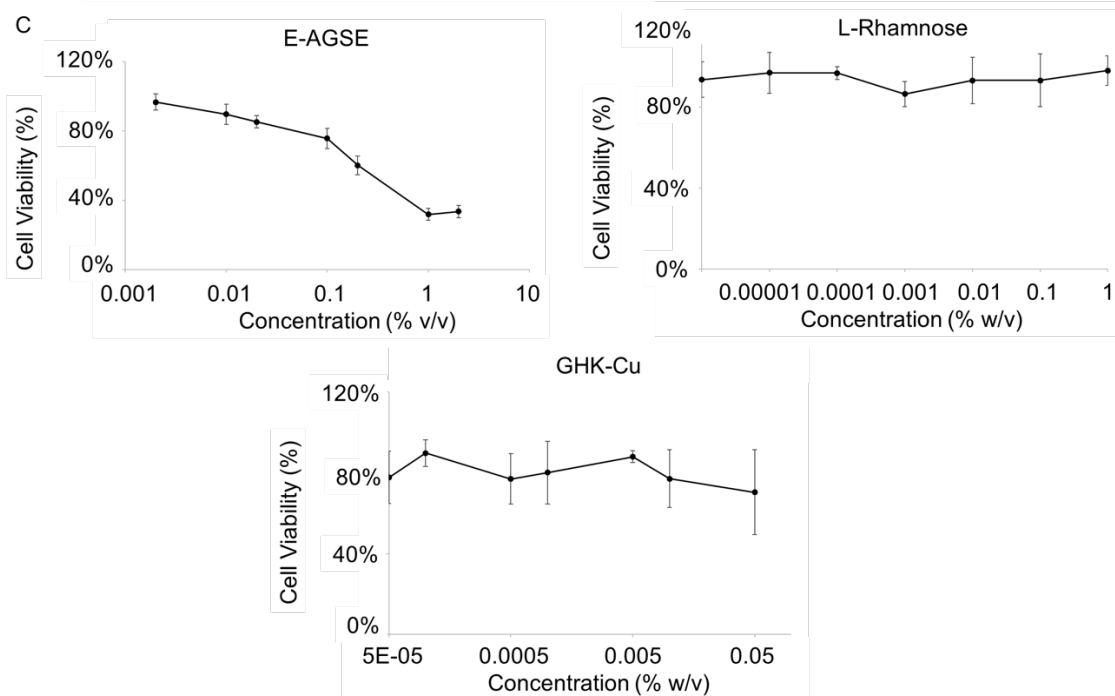


Figure S3. Cell viability of test materials in cell culture. (A) Human dermal fibroblasts (HDFBs), (B) normal human melanocytes (NHMCs), and (C) normal human epidermal keratinocytes (NHEKs) were treated with the indicated concentrations for 24 hours and cell viability was measured by MTT reduction assay monitored using formazan formation via optical density (490 nm). The data represent the mean \pm SD of cumulative data from three independent experiments.

Table S1. Clinical study demographics

Characteristic	Completed (n = 31)
Age (\pm SD)	40.7 (6.1)
Range	28-50
Gender (Male/Female)	0/31
Race	Caucasian: 0
	African American: 0
	Asian: 31
	American Indian: 0