

Supplementary Table S1. Total polyphenol, flavonoids, and carotenoid contents from seaweed extracts including *Pyropia yezoensis*

Species	Total polyphenol content (g GAE/100g)	Total flavonoids content (g QE/100g)	Total Carotenoid content (g BE/1000g)
<i>Pyropia yezoensis</i> (80% MeOH)	6.27 ± 0.73	2.53 ± 0.18	3.55 ± 2.10
<i>Polyopes affinis</i> (80% EtOH)	0.55 ± 0.46	1.11 ± 0.17	1.38 ± 1.62
<i>Polyopes affinis</i> (70% MeOH)	4.37 ± 0.54	2.26 ± 0.54	0.88 ± 1.2
<i>Gloiopeltis tenax</i> (80% EtOH)	1.23 ± 0.36	2.84 ± 0.17	3.88 ± 1.6

Determination of total phenolics content (TPC), total flavonoids content (TFC) and beta carotene content (β -carotene) calibration curve were developed as gallic acid (absorbance read at 725 nm), quercetin (absorbance was read at 415 nm), and β carotene (wavelength of 450 nm). GAE: gallic acid equivalent, QE: quercetin equivalent, BE: β carotene equivalent.