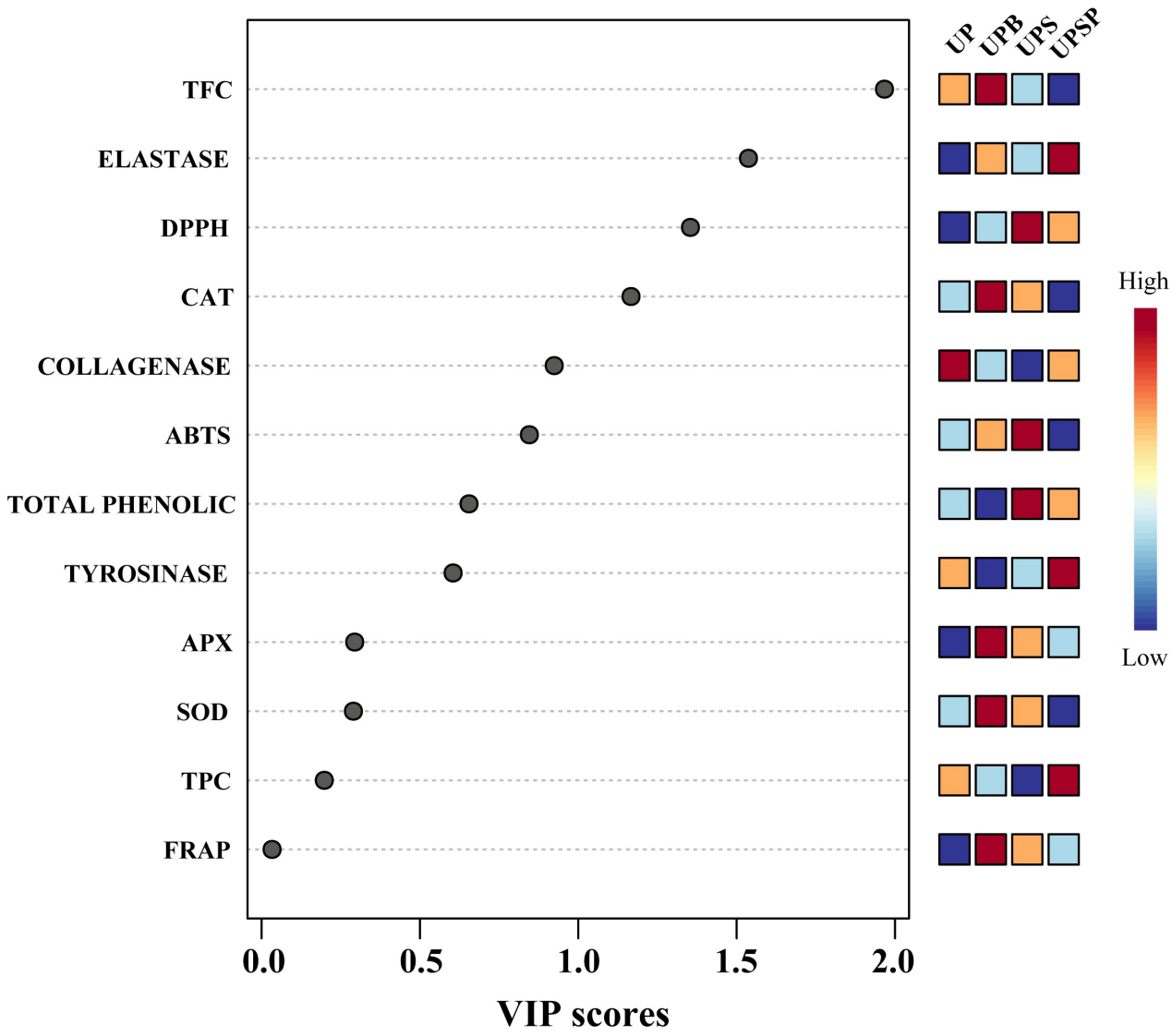

Figure S1. The main components separating the different parts of the Asian kelp based on the VIP in PLS-DA. Note: ABTS, ABTS radical scavenging activity; APX, Ascorbate Peroxidase Activity; CA, Collagenase Inhibitory Activities; CAT, Catalase Activity; DPPH, DPPH radical scavenging activity; EA, Elastase Inhibitory Activities; FRAP value, Ferric Reducing Antioxidant Power value; SOD, Superoxide Dismutase Activity; TA, Tyrosinase inhibitory activity; TFC, Total Flavonoid content; and TPC, Total polyphenol content.

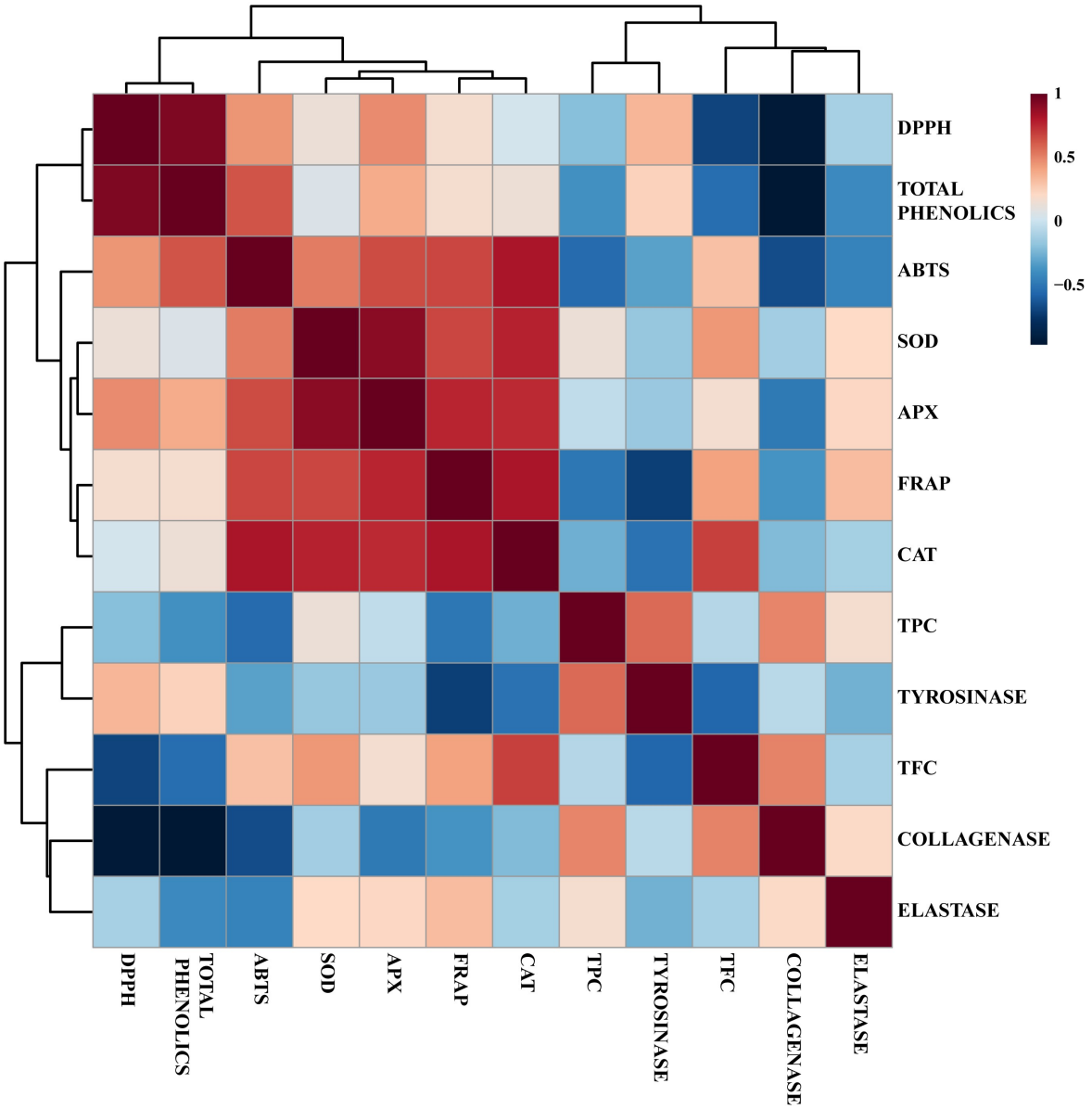

Figure S2. Correlation matrix of metabolites identified in different parts of Asian Kelp. Each square indicates the Pearson's correlation coefficient of a pair of compounds, and the value of the correlation coefficient is represented by the intensity of blue or red colors, as indicated on the color scale. Note: ABTS, ABTS radical scavenging activity; APX, Ascorbate Peroxidase Activity; CA, Collagenase Inhibitory Activities; CAT, Catalase Activity; DPPH, DPPH radical scavenging activity; EA, Elastase Inhibitory Activities; FRAP value, Ferric Reducing Antioxidant Power value; SOD, Superoxide Dismutase Activity; TA, Tyrosinase inhibitory activity; TFC, Total Flavonoid content; and TPC, Total polyphenol content.