

Supplementary Information

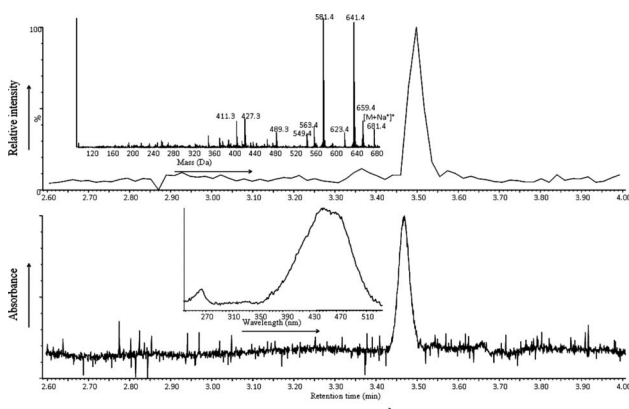


Figure S1. UPLC-MS analyses of the pure fraction G27a. UV-VIS-photodiodearray detection (lower chromatogram, detection 190–500 nm with insert of UV spectrum at 3.48 min). Upper chromatogram ESI-pos-MS ($m/z = 659.4$) with insert of the corresponding MS.

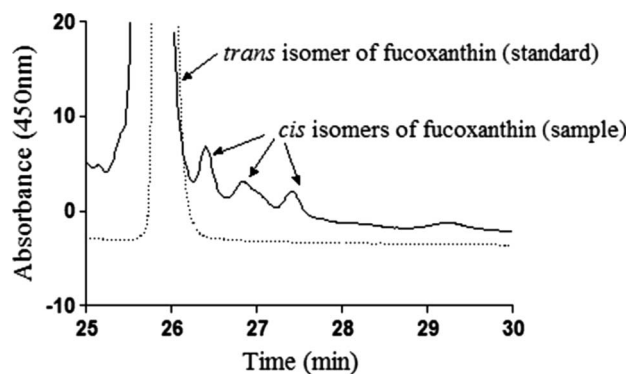


Figure S2. NP-HPLC profile comparison for isomers amongst standard fucoxanthin (...) and fucoxanthin obtained from non-polar surface extract (sample) prepared by 'dipping technique' (—). Gradient: 100% *n*-heptane, 10 min; linear gradient to 100% EtOAc for a further 20 min.

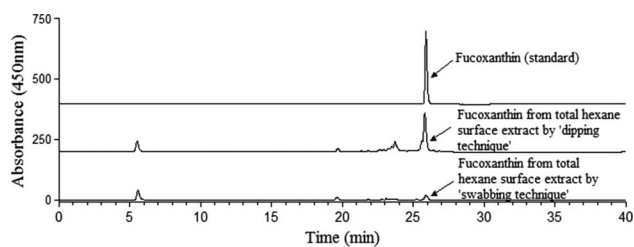


Figure S3. NP-HPLC profile comparison amongst standard fucoxanthin and fucoxanthin obtained from *F. vesiculosus* with two different extraction methods. Gradient: 100% *n*-heptane, 10 min; linear gradient to 100% EtOAc for a further 20 min.

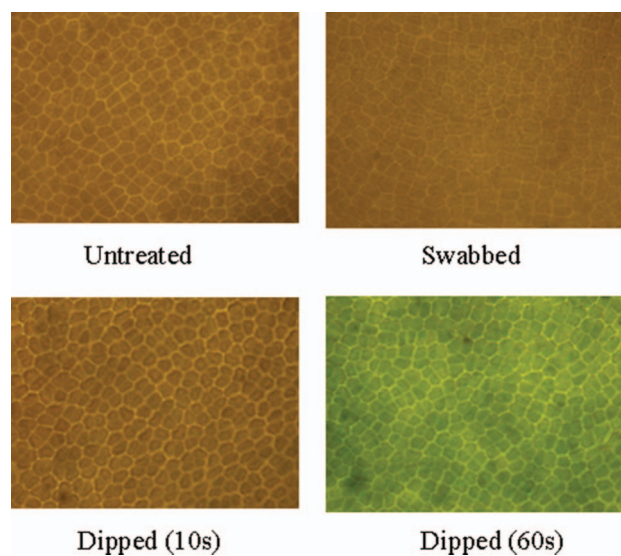


Figure S4. Thallus surface of un-treated and treated (swabbing and dipping technique (10 s and 60 s)) *F. vesiculosus*. Incorporation of Evans blue at 60 s indicated cell lysis.