

Supplementary file

Enhanced Expression of p53 and Suppression of PI3K/Akt/mTOR by Three Red Sea Algal Extracts: Insights on their Composition by LC-MS-based Metabolic Profiling and Molecular Networking

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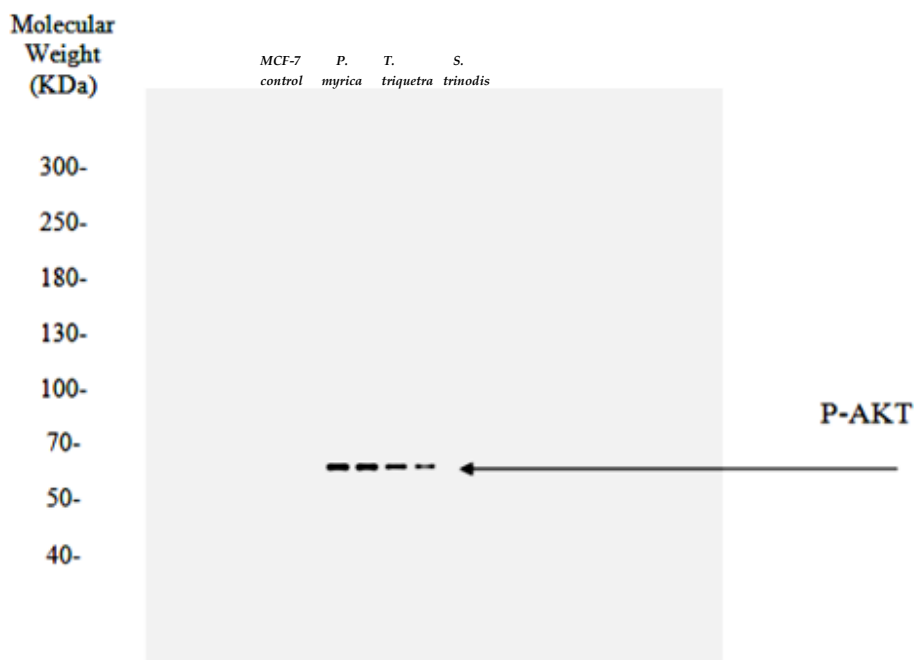


Figure S1. Ant-p-Akt antibody protein expression level for algae extracts. The whole raw data immunoblotting gel before cropping

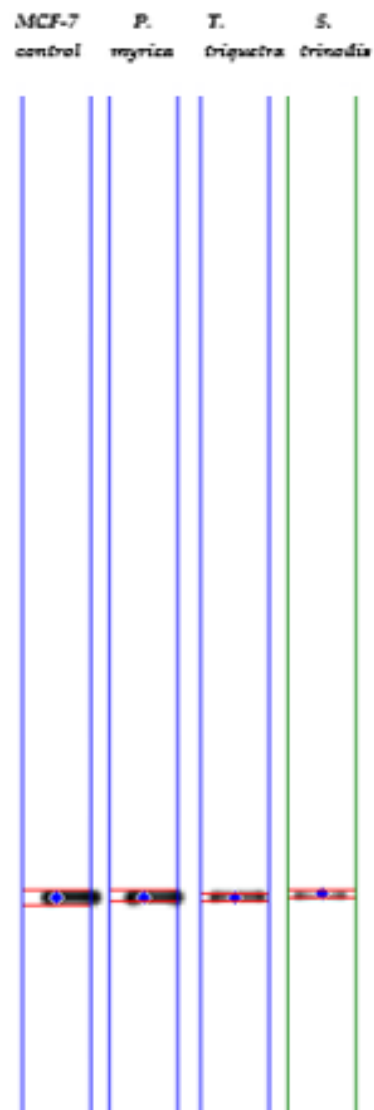


Figure S2. Computerized bands analysis of anti-p-Akt antibody protein expression level for algae extracts.

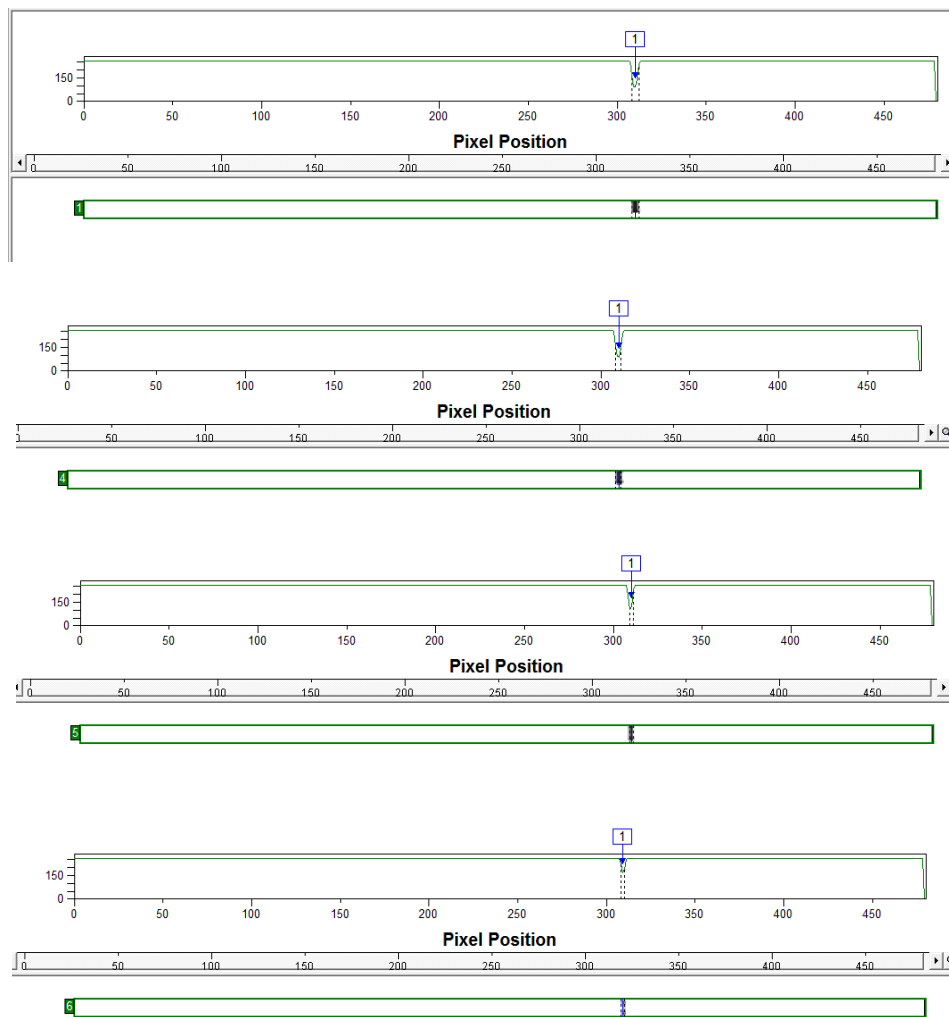


Figure S3. Dendrograms of anti-p-Akt antibody protein expression level bands analysis for all algae extracts.

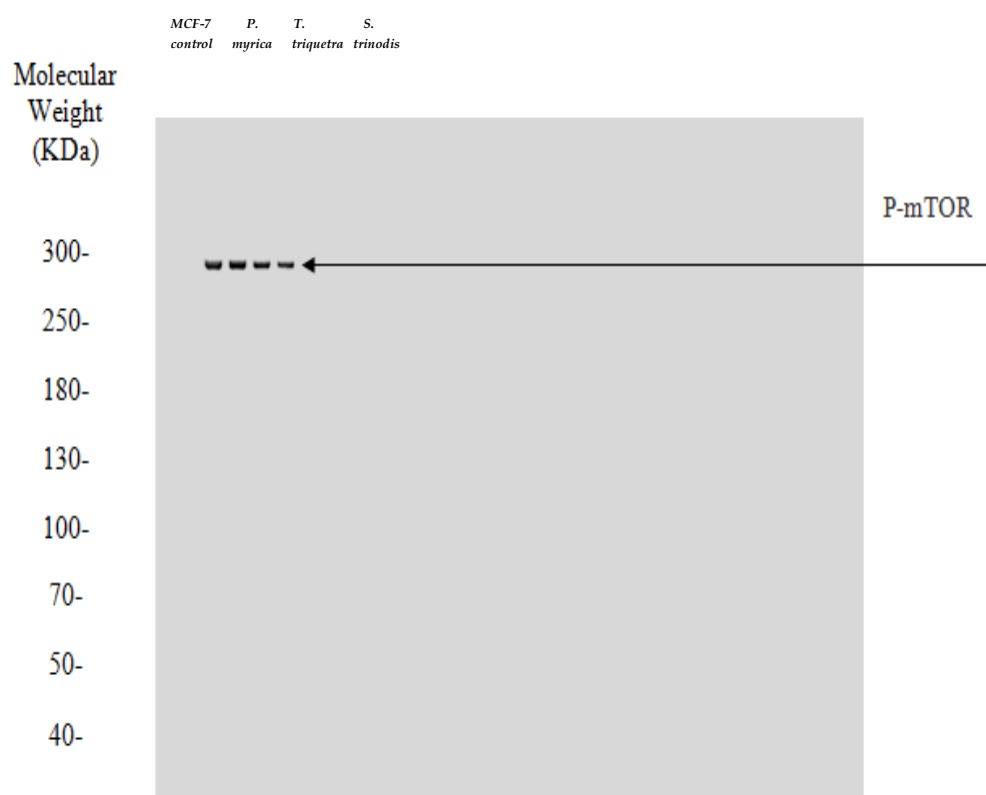


Figure S4. Anti-p-mTOR antibody protein expression level for algae extracts. The whole raw data immunoblotting gel before cropping

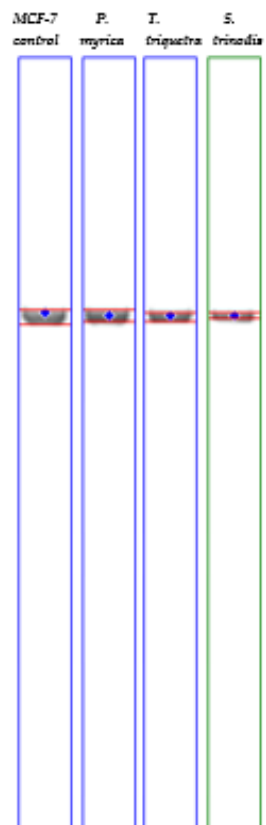


Figure S5. Computerized bands analysis of anti-p-mTOR antibody protein expression level for algae extracts.

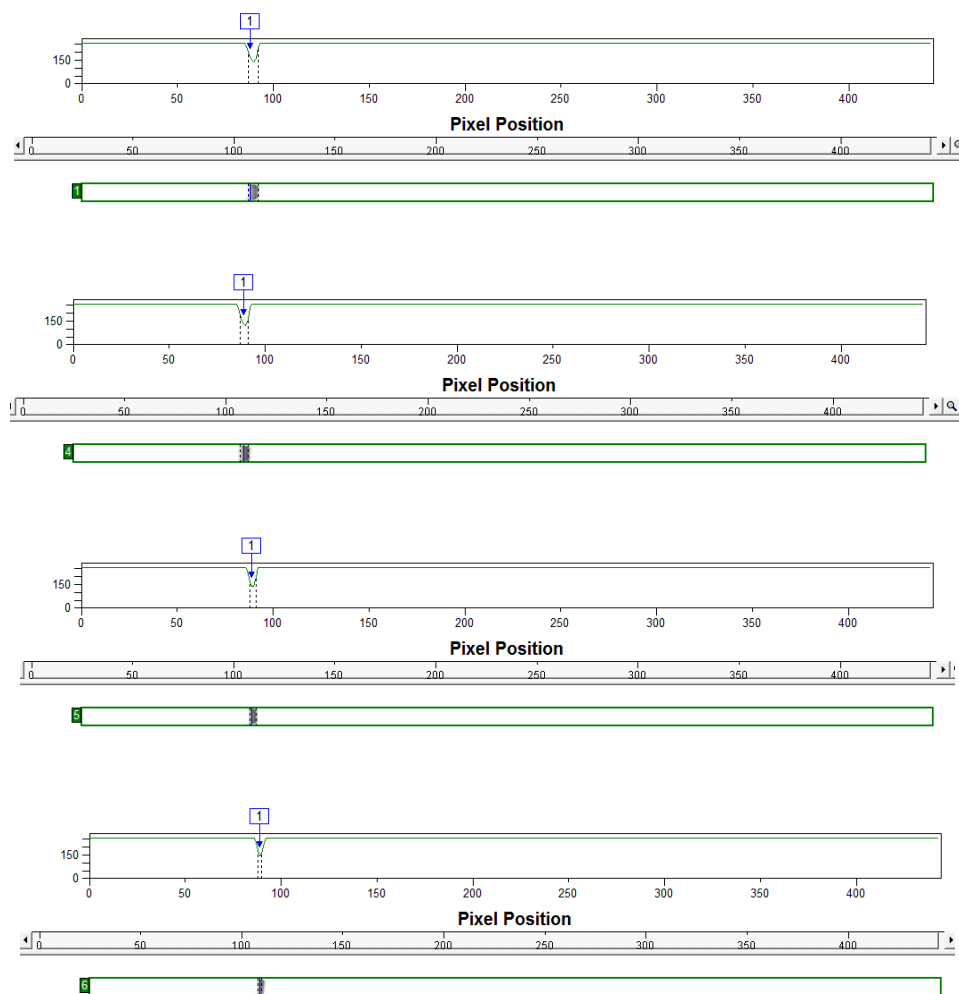


Figure S6. Dendrograms of anti-p-mTOR antibody protein expression level band analysis for algae extracts.

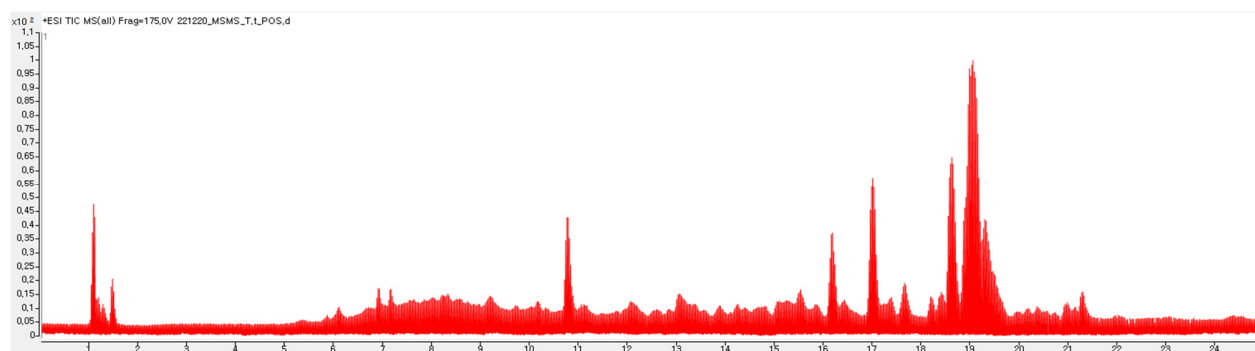


Figure S7. Total ion chromatogram of the extract of the Red Sea algae *T. triquetra* in positive modes.

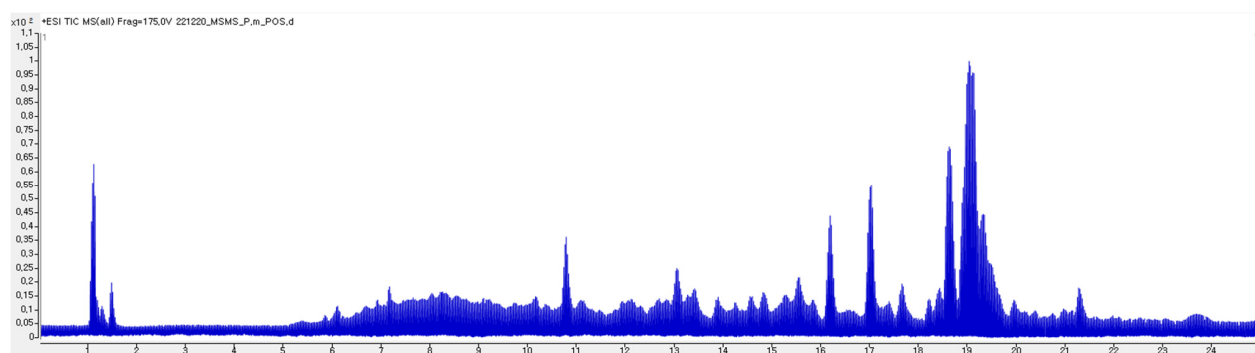


Figure S8. Total ion chromatogram of the extract of the Red Sea algae *P. myrica* in positive mode.

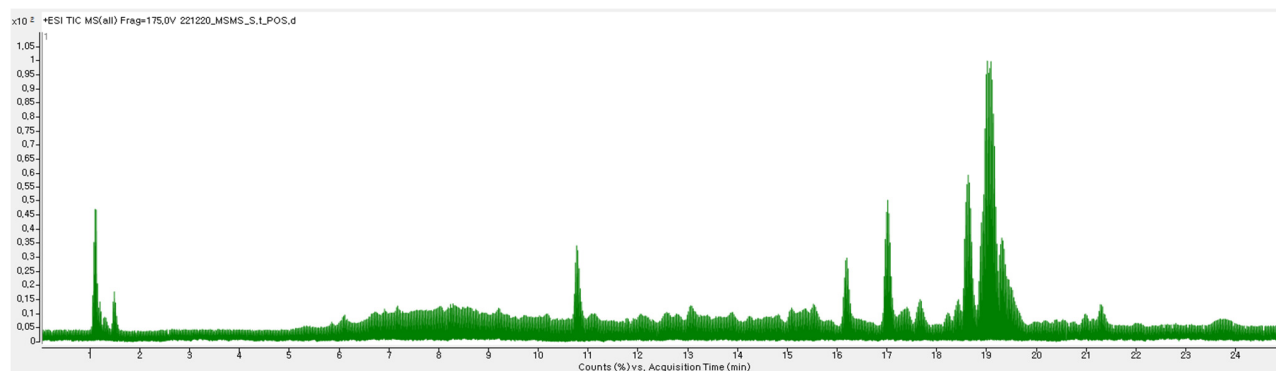


Figure S9. Total ion chromatogram of the extract of the Red Sea algae *S. trinodis* in positive mode.

Table S1. The expression level of anti-p-Akt protein bands after normalized with β -actin for algae extracts.

| MCF-7 control | <i>P. myrica</i> | <i>T. triquetra</i> | <i>S. trinodis</i> |
|---------------|------------------|---------------------|--------------------|
| Lane % | Lane % | Lane % | Lane % |
| 0.80 | 0.48 | 0.35 | 0.29 |

Table S2. The expression level of anti-p-mTOR protein bands after normalized with β -actin for algae extracts.

| MCF-7 control | <i>P. myrica</i> | <i>T. triquetra</i> | <i>S. trinodis</i> |
|---------------|------------------|---------------------|--------------------|
| Lane % | Lane % | Lane % | Lane % |
| 0.72 | 0.53 | 0.39 | 0.28 |