Peridinin

**Standard spectrum in reference solvents**

- **A**: n-hexane
- **B**: acetone
- **C**: ethanol

**Molecular structure**

```
CH3COO

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**Diode array spectrum in SCOR eluant**

**HPLC: Peridinin, peak 7**

**Amphidinium carterae**

**SCOR abbreviation:** Perid

**Occurrence:** Photosynthetic dinoflagellates (major pigment), except those containing endosymbionts of other algal classes

**Colour:** Brick red

**Molecular formula:** C_{39}H_{50}O_{7}

**Molecular weight:** 630.82

**Specific extinction coefficient:**
- **ε** (100 ml g^{-1} cm^{-1})
  - 1340 (at 466 nm in acetone)
  - 1325 (at 472 nm in ethanol)
  - 1360 (at 469 nm in methanol)
  - Jeffrey & Haxo (1968)

**Molar extinction coefficient:**
- **ε** (1 mol^{-1} cm^{-1})
  - 84.5 x 10^{3} (at 466 nm in acetone)
  - 83.6 x 10^{3} (at 472 nm in ethanol)
  - 85.8 x 10^{3} (at 469 nm in methanol)
  - Calculated from **ε** above

**UV-vis spectra:**

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Maxima (nm)</th>
<th>Band ratio</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
</tr>
<tr>
<td>Acetone</td>
<td>458</td>
<td>474</td>
<td>0</td>
</tr>
<tr>
<td>Ethanol</td>
<td>474</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ethanol</td>
<td>472</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>(430) 455.5</td>
<td>484.7</td>
<td>75</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>(428) 454</td>
<td>484</td>
<td>85</td>
</tr>
<tr>
<td>Methanol</td>
<td>469</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HPLC Eluant</td>
<td>474</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Alteration products:** Cis-isomers

**Culture from which SCOR data were obtained:**

- *Amphidinium carterae (dinoflagellate)*

**Additional reference(s):**

- Jeffrey & Haxo (1968);
- Strain et al. (1971);
- Johansen et al. (1974);
- Jeffrey et al. (1975)