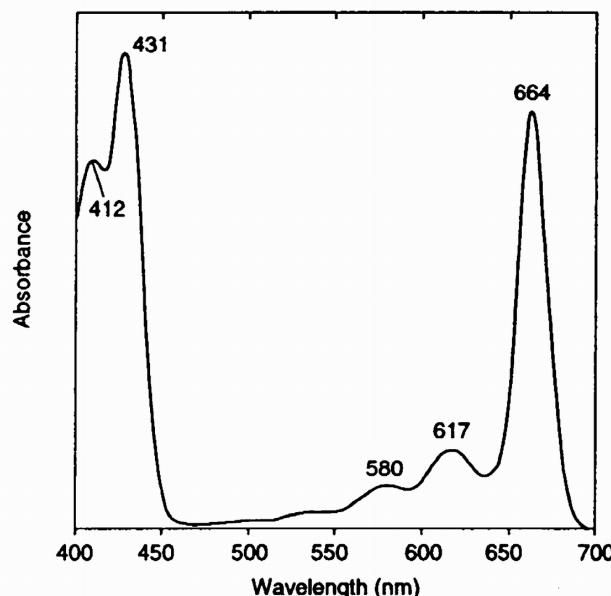


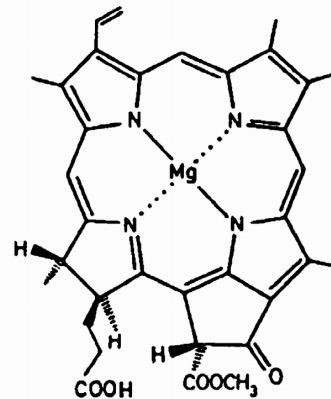
Chlorophyllide *a*

HPLC peak 3

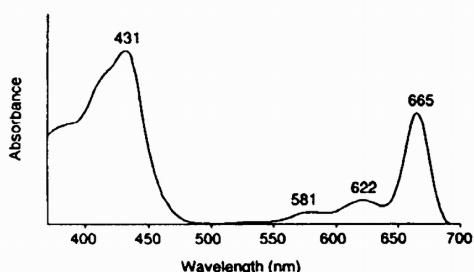
Standard spectrum in reference solvent: acetone (100%)



Molecular structure

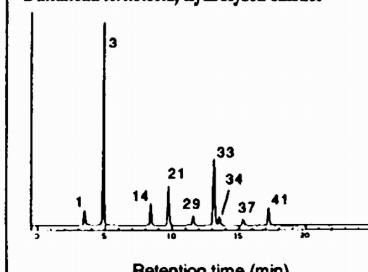


Diode array spectrum in SCOR eluant



HPLC: Chlorophyllide *a*, peak 3

Dunaliella tertiolecta, hydrolysed extract



Chlorophyllide *a*

Property

Data

Name:	(Trivial) (IUPAC)	Chlorophyllide <i>a</i> Trivial name sufficient; see Hynninen (1991)
SCOR abbreviation:	Chlide <i>a</i>	
Occurrence:	Senescent tissue, damaged centric diatoms, zooplankton faecal pellets	
Colour:	Blue-green	
Molecular formula:	C ₃₅ H ₃₄ N ₄ O ₅ Mg	
Molecular weight:	614.97	
Specific extinction coefficient: α (l g ⁻¹ cm ⁻¹)	127 (at 664 nm in 90% acetone) Calculated from Lorenzen & Jeffrey (1980)	
Molar extinction coefficient: ϵ (l mol ⁻¹ cm ⁻¹)	78.3 x 10 ³ (at 664 nm in 90% acetone) Calculated from Lorenzen & Jeffrey (1980)	

UV-vis spectra:

Solvent	Absorbance maxima (nm)					Band ratio*	Reference
100% Acetone	412	431	580	617	664	1.14	Jeffrey & Lorenzen (unpublished)
HPLC eluant		431	581	622	665	1.11	SCOR WG 78: Wright et al. (1991) method

Fluorescence spectra:

*Soret (blue maximum): red ratio

Solvent	Excitation (nm)	Emission (nm)	Reference
100% Acetone	426	667	SCOR WG 78 data

Alteration products:

Pheophorbide *a* (Mg-free derivative)

Culture from which SCOR data were obtained:

Phaeodactylum tricornutum (diatom);
Dunaliella tertiolecta (green flagellate)

Additional reference(s):

Barrett & Jeffrey (1964); Jeffrey & Hallegraeff
(1987)