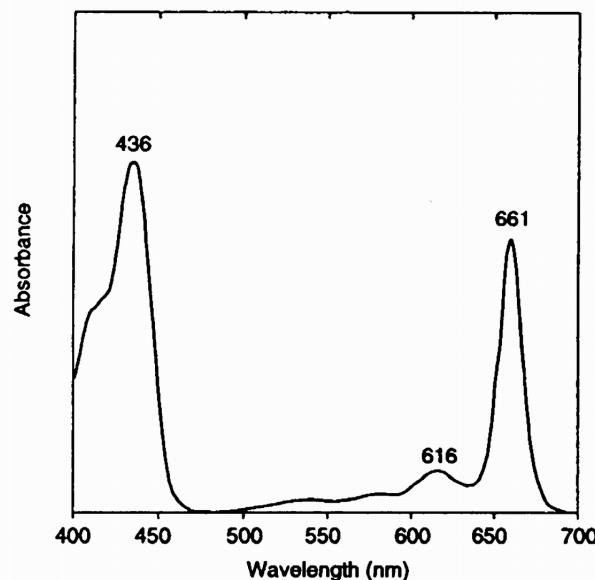


Divinyl chlorophyll *a*

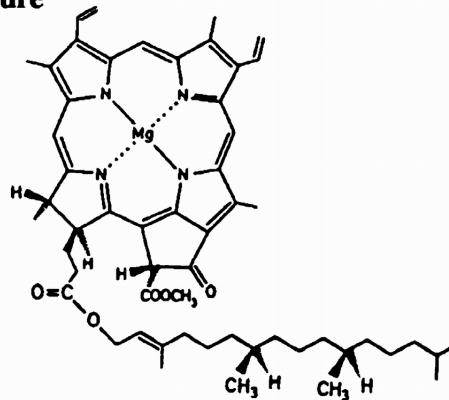
HPLC peak 41*

Standard spectrum in reference solvent: acetone (100%)

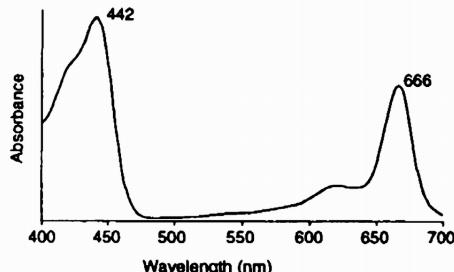


Data from
Gieskes and
Kraay (1983)

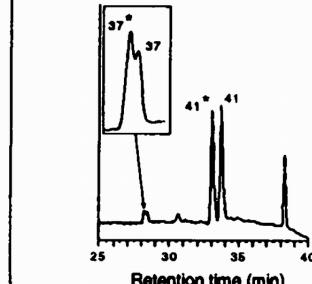
Molecular structure



Diode array spectrum in Repeta eluant



HPLC: Divinyl chlorophyll *a*, peak 41†



† Goericke and Repeta (1992) HPLC RP-8 system

Divinyl chlorophyll *a*

Property

Data

Name:	(Trivial) (IUPAC)	Divinyl chlorophyll <i>a</i> 8-deethyl-8-vinyl-chlorophyll <i>a</i> = $8^1,8^2$ -didehydro-chlorophyll <i>a</i>
SCOR abbreviation:	DV chl <i>a</i>	
Occurrence:		<i>Prochlorococcus marinus</i> (class Prochlorophyceae)
Colour:		Green
Molecular formula:		C ₅₅ H ₇₀ N ₄ O ₅ Mg
Molecular weight:		891.48
Specific extinction coefficient: α (l g ⁻¹ cm ⁻¹)		Not determined
Molar extinction coefficient: ϵ (l mol ⁻¹ cm ⁻¹)		Assume identical to chlorophyll <i>a</i>

UV-vis spectra:

Solvent	Absorbance maxima (nm)			Band ratio*	Reference
Acetone	436	616	661	1.28	Gieskes & Kraay (1983)
Diethyl ether	436	661			Bazzaz (1981)
Diethyl ether	435	615	660		Goericke & Repeta (1992)
HPLC Eluant	442		666	1.51	Repeta (unpub. data)

Fluorescence spectra:

*Soret (blue maximum): red ratio

Solvent	Excitation (nm)	Emission (nm)	Reference
No data available			

Alteration products:

8-deethyl-8-vinyl pheophytin *a*; easily bleached (Gieskes, 1991)

Culture from which SCOR data were obtained:

Culture of *Prochlorococcus* not available to SCOR WG 78

Additional reference(s):

Gieskes & Kraay (1983); Chisholm *et al.* (1988, 1992); Goericke & Repeta (1992)