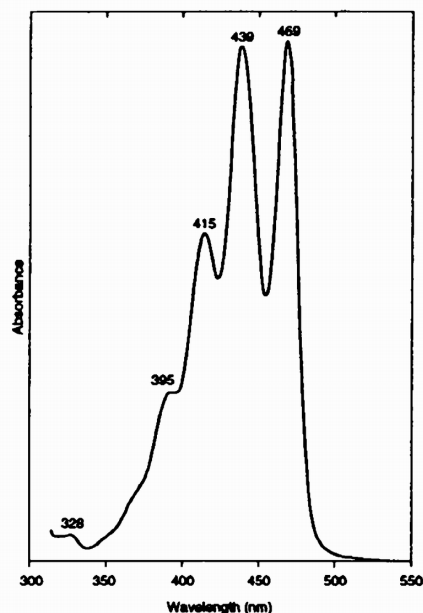
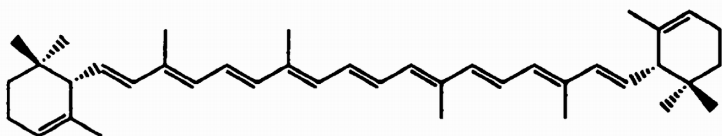


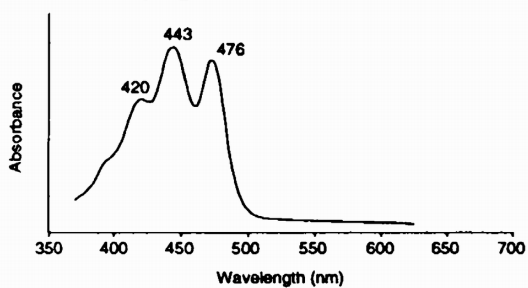
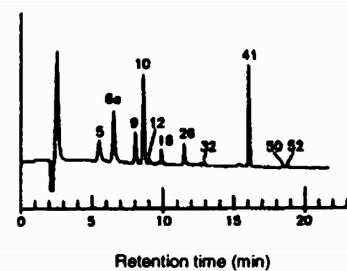
Standard spectrum in reference solvent: hexane



Molecular structure



Diode array spectrum in SCOR eluant

HPLC: ϵ, ϵ -carotene, peak 50
Pelagococcus subviridis

Property

Data

Name:	(Trivial) (IUPAC)	ϵ -Carotene (6 <i>S</i> ,6' <i>S</i>)- ϵ, ϵ -Carotene
SCOR abbreviation:		$\epsilon\epsilon$ -car
Occurrence:		Minor or trace pigment in marine chrysophytes (e.g. <i>Pelagococcus subviridis</i>), cryptomonads
Colour:		Yellow
Molecular formula:		$C_{40}H_{56}$
Molecular weight:		536.88
Specific extinction coefficient:		2900 (at 439 nm in hexane) Chapman & Haxo (1963) 3010 (at 440 nm in petroleum ether) Schwieter <i>et al.</i> (1965)
Molar extinction coefficient:		156×10^3 (at 439 nm in hexane) 162×10^3 (at 440 nm in petroleum ether) Calculated from $E_{1\%}^{1\text{cm}}$ above

UV-vis spectra:

Solvent	Maxima (nm)			Band ratio %III:II	Reference
	I	II	III		
Ethanol	417	440	470		Chapman & Haxo (1963)
Petroleum ether	416	440	470		Schwieter <i>et al.</i> (1965)
Benzene	425	451	482		Chapman & Haxo (1963)
Hexane	415	439	469	101	Bjørnland <i>et al.</i> (1989)
HPLC Eluant	420	443	476	79	SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:

Cis-isomers

Culture from which SCOR data were obtained:

Pelagococcus subviridis (chrysophyte)

Additional reference(s):

Goodwin (1980); Bjørnland *et al.* (1989)