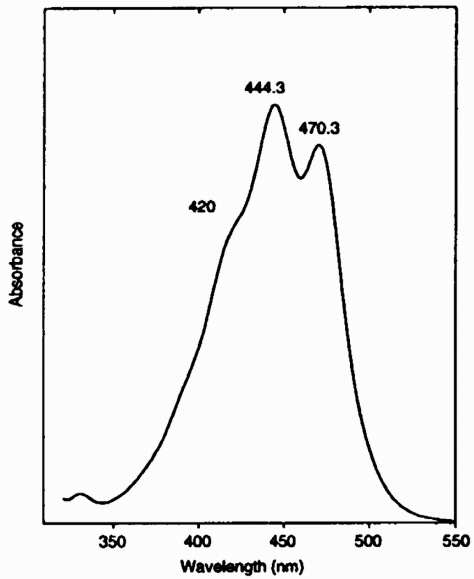
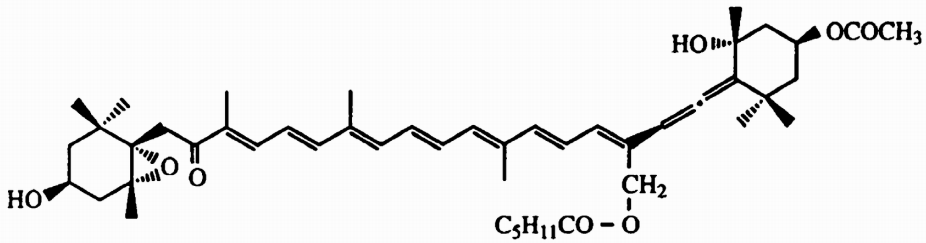
19'-Hexanoyloxyfucoxanthin

HPLC peak 15

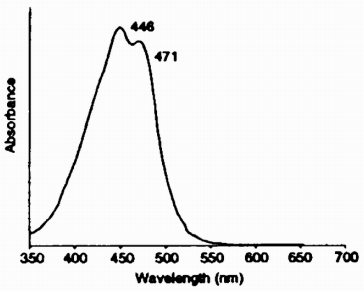
Standard spectrum in reference solvent: acetone



Molecular structure

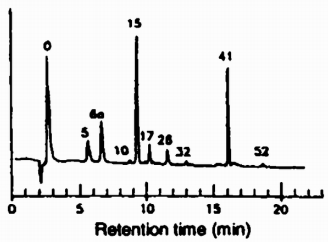


Diode array spectrum in SCOR eluant



HPLC: 19'-Hexanoyloxyfucoxanthin, peak 15

Emiliania huxleyi



19'-Hexanoyloxyfucoxanthin

Property		Data
Name:	(Trivial)	**19'-Hexanoyloxyfucoxanthin**
	(IUPAC)	(3*S*,5*R*,6*S*,3'*S*,5'*R*,6'*S*)-5,6-Epoxy-3,3',5',19'-tetrahydroxy-6',7'-didehydro-5,6,7,8,5',6'-hexahydro-β,β-caroten-8-one 3'-acetate 19'-hexanoate
SCOR abbreviation:		Hex-fuco
Occurrence:		Major or minor pigment in several prymnesiophytes, some dinoflagellates
Colour:		Orange
Molecular formula:		$C_{48}H_{68}O_8$
Molecular weight:		773.06
Specific extinction coefficient: $E^{1\%}_{1\,cm}$ (100 ml g^{-1} cm^{-1})		1300 (at 445 nm in ethanol) Haxo (1985); Calculated from Jensen (1966a) 1420 (at 445 nm in acetone) Calculated from ε for fucoxanthin; Haugan & Liaaen-Jensen (1989), see Preamble
Molar extinction coefficient: ε (l mol^{-1} cm^{-1})		109×10^3 (at 445 nm in acetone) Assumed to be equal to ε for fucoxanthin, Haugan & Liaaen-Jensen (1989)

UV-vis spectra:

Solvent	Maxima (nm) I	II	III	Band ratio %III:II	Reference
Acetone	(420)	444.3	470.3	47	SCOR WG 78 data
Acetone		445	471	44	Wright & Jeffrey (1987)
n-Hexane	(423)	445	474	64	Bjørnland *et al.* (1988)
Ethanol		447	471	25	Wright & Jeffrey (1987)
Diethyl ether		444	470	45	Wright & Jeffrey (1987)
HPLC Eluant		447	470	22	SCOR W G 78: Mantoura & Llewellyn (1983) method
HPLC Eluant	418	446	471	34	SCOR WG 78: Wright *et al.* (1991) method

Alteration products:	*Cis*-isomers
Culture from which SCOR data were obtained:	*Emiliania huxleyi* (prymnesiophyte)
Additional reference(s):	Arpin *et al.* (1976); Hertzberg *et al.* (1977); Bjørnland & Tangen (1979); Haxo (1985); Wright & Jeffrey (1987); Bjørnland & Liaaen-Jensen (1989); Jeffrey & Wright (1994)