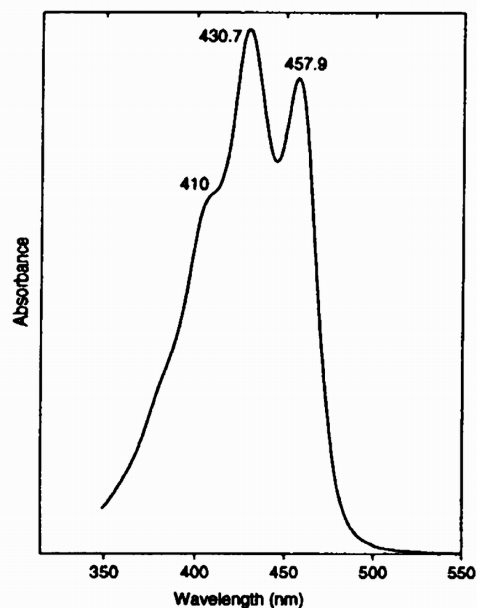
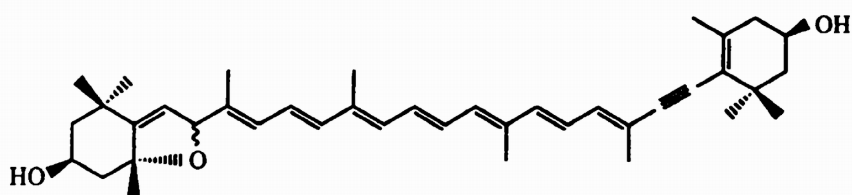


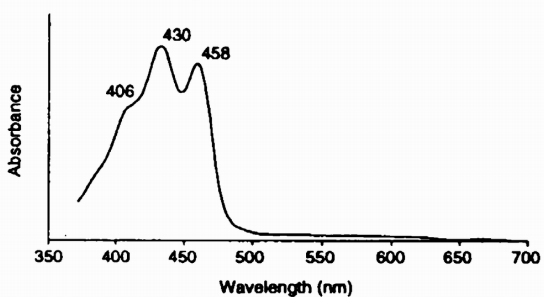
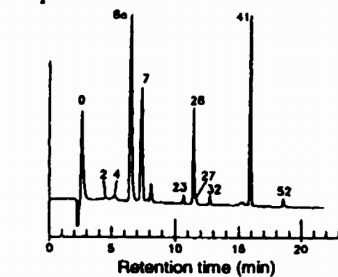
Standard spectrum in reference solvent: acetone



Molecular structure



Diode array spectrum in SCOR eluant

HPLC: Diadinochrome, peak 27
Amphidinium carterae

Property

Data

Name:	(Trivial) (IUPAC)	Diadinochrome I and II 5,8-Epoxy-7',8'-didehydro-5,8-dihydro- β , β -carotene-3,3'-diol
SCOR abbreviation:		Diadchr
Occurrence:		Rearrangement product of diadinoxanthin
Colour:		Yellow
Molecular formula:		$C_{40}H_{54}O_3$
Molecular weight:		582.86
Specific extinction coefficient: $E_{1\text{ cm}}^{1\%}$ ($100\text{ ml g}^{-1}\text{ cm}^{-1}$)		Not known; use 2500 (at 428 nm in acetone), see Davies (1976)
Molar extinction coefficient: ϵ ($1\text{ mol}^{-1}\text{ cm}^{-1}$)		146×10^3 (at 428 nm in acetone) Calculated from $E_{1\text{ cm}}^{1\%}$ above

UV-vis spectra:

Solvent	Maxima (nm)			Band ratio %III:II	Reference
	I	II	III		
Acetone	(410)	431	458	63	SCOR WG 78 data
Diethyl ether	405	429	456		Fiksdahl <i>et al.</i> (1984b)
HPLC Eluant	406	430	458	76	SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:

Readily formed by acid catalysed conversion of diadinoxanthin epoxide groups to furanoid groups. Both the 8*R* and 8*S* diadinochrome epimers are formed.

Culture from which SCOR data were obtained:

Amphidinium carterae (dinoflagellate)

Additional reference(s):

Liaen-Jensen (1971,1990a)