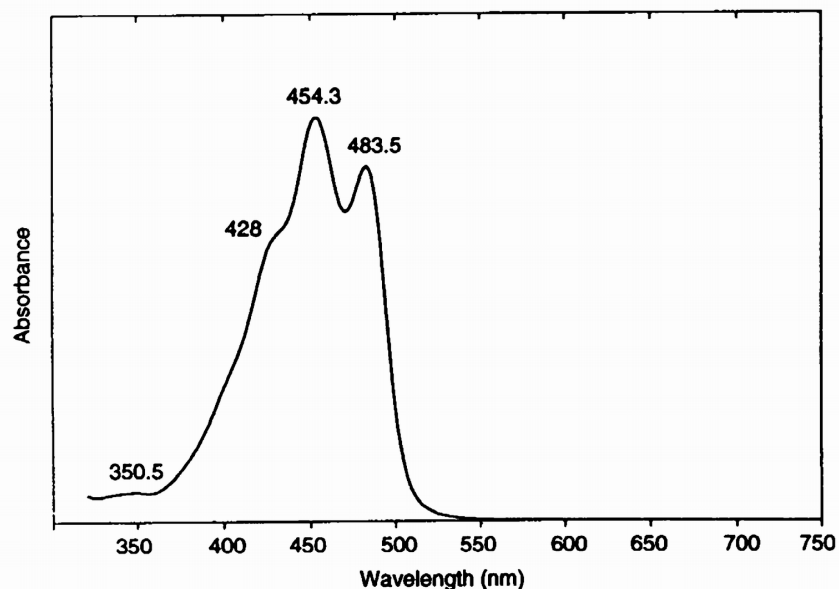


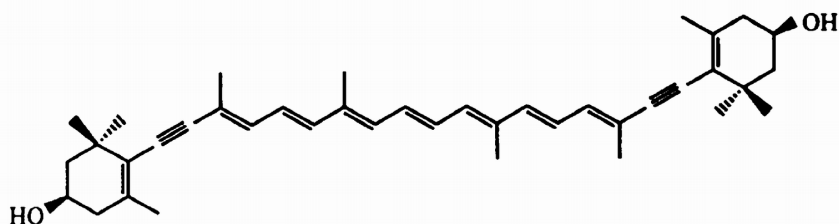
Alloxanthin

HPLC peak 30

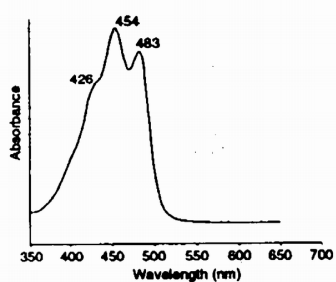
Standard spectrum in reference solvent: acetone



Molecular structure

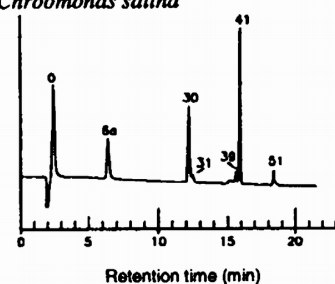


Diode array spectrum in SCOR eluant



HPLC: Alloxanthin, peak 30

Chroomonas salina



Alloxanthin

Property	Data		
Name: (Trivial)	Alloxanthin		
(IUPAC)	(3 <i>R</i> ,3' <i>R</i>)-7,8,7',8'-Tetrahydro- β , β -carotene-3, 3'-diol		
SCOR abbreviation:	Allo		
Occurrence:	Cryptomonads (major carotenoid)		
Colour:	Yellow-orange		
Molecular formula:	C ₄₀ H ₅₂ O ₂		
Molecular weight:	564.85		
Specific extinction coefficient:	2500 (at 454 nm in acetone)		
$E_{1\text{ cm}}^{1\%}$ (100 ml g ⁻¹ cm ⁻¹)	Not determined; use $E_{1\text{ cm}}^{1\%}$ for β , β -carotene; Davies (1976)		
Molar extinction coefficient:	141 x 10 ³ (at 454 nm in acetone)		
ϵ (l mol ⁻¹ cm ⁻¹)	Calculated from $E_{1\text{ cm}}^{1\%}$ above		
UV-vis spectra:			
Solvent	Maxima (nm)	Band ratio	Reference
	I II III	%III:II	
100% Acetone	(428) 454.3 483.5	50	SCOR WG 78 data
Ethanol	(427) 450 478	29	Hager & Stransky (1970c)
Diethyl ether	(430) 451 481	44	Pennington <i>et al.</i> (1985)
Hexane	(427) 451 480	50	Cheng <i>et al.</i> (1974)
HPLC Eluant	(427) 454 482	47	SCOR WG 78: Mantoura & Llewellyn (1983) method
HPLC Eluant	(428) 454 483	43	SCOR WG 78: Wright <i>et al.</i> (1991) method
Alteration products:	<i>Cis</i> -isomers		
Culture from which SCOR data were obtained:	<i>Chroomonas salina</i> (cryptomonad)		
Additional reference(s):	Chapman (1966); Pennington <i>et al.</i> (1985)		