

Monadoxanthin

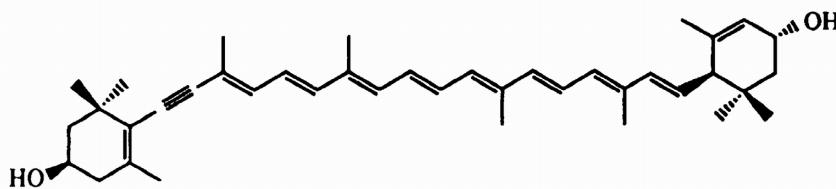
HPLC peak 31

Monadoxanthin

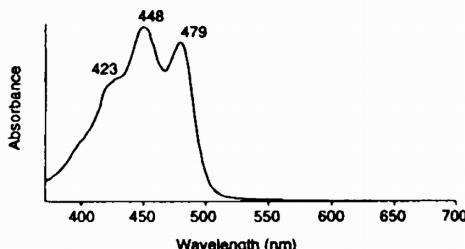
Standard spectrum in reference solvent

No data available

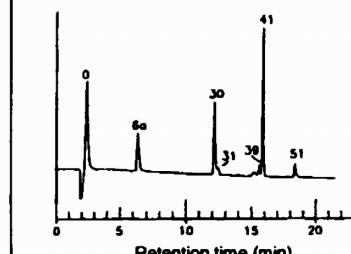
Molecular structure



Diode array spectrum in SCOR eluant



HPLC: Monadoxanthin, peak 31
Chroomonas salina



Property

Data

Name:	(Trivial) (IUPAC)	Monadoxanthin 7,8-Didehydro- β,ε -carotene-3,3'-diol
SCOR abbreviation:	Monado	
Occurrence:		Minor pigment in cryptomonads
Colour:		Yellow
Molecular formula:		C ₄₀ H ₅₄ O ₂
Molecular weight:		566.87
Specific extinction coefficient: E _{1 cm} ^{1%} (100 ml g ⁻¹ cm ⁻¹)		2500 (at 446 nm in diethyl ether) Not determined, use E _{1 cm} ^{1%} for β,β -carotene; Davies (1976)
Molar extinction coefficient: ε (1 mol ⁻¹ cm ⁻¹)		142 × 10 ³ (at 446 nm in diethyl ether) Calculated from E _{1 cm} ^{1%} above
UV-vis spectra:		

Solvent	Maxima (nm)			Band ratio % III:II	Reference
	I	II	III		
Diethyl ether	428	446	476	60	Pennington <i>et al.</i> (1985)
n-Hexane	422	445	475	72	Chapman (1966)
Benzene	430	456	487		Cheng <i>et al.</i> (1974)
HPLC Eluant	(423)	448	479	65	SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:	Cis-isomers
Culture from which SCOR data were obtained:	<i>Chroomonas salina</i> (cryptomonad)
Additional reference(s):	Cheng <i>et al.</i> (1974); Pennington <i>et al.</i> (1985)