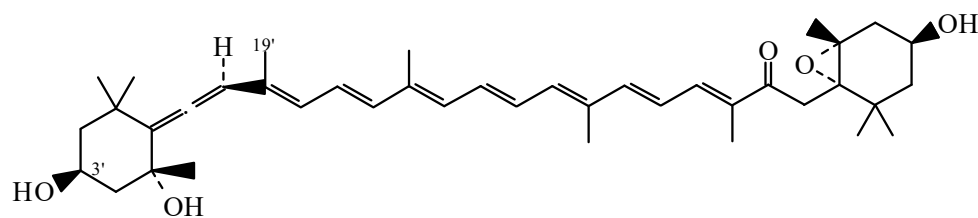




>>Entry Name: Fucoxanthinol

Synonym(s): 6',7'-Didehydro-5,6-epoxy-5,5',6,6',7,8-hexahydro-3,3',5'-trihydroxy- β,β -caroten-8-one



CAS Registry Number: 7176-02-5

Molecular Formula: $C_{40}H_{56}O_5$

Molecular Weight: 616.879

Accurate Mass: 616.412775

Percentage Composition: C 77.88%; H 9.15%; O 12.97%

Biological Source: Constit. of *Paracentrotus lividus* and *Fucus vesiculosus*

Physical Description: Cryst. (C_6H_6 /pentane)

Melting Point: Mp 134-138°

UV: [neutral] $\lambda_{\max}$ 445 () (Me_2CO)

>>Derivative: 3'-Ac

Synonym(s): Fucoxanthin. 3'-Acetoxy-6',7'-didehydro-5,6-epoxy-5,5',6,6',7,8-hexahydro-3,5'-dihydroxy- β,β -caroten-8-one. Fucoxanthol

CAS Registry Number: 3351-86-8

Molecular Formula: $C_{42}H_{58}O_6$

Molecular Weight: 658.917

Accurate Mass: 658.42334

Percentage Composition: C 76.56%; H 8.87%; O 14.57%

Biological Source: Constit. of brown algae, freshwater algae, and diatoms

Physical Description: Red-brown prisms (MeOH)

Melting Point: Mp 158-159° (168°)

Optical Rotation: $[\alpha]_{Hg}^{20} +73.5$ ($CHCl_3$)

Solubility: BERDY SOL: Sol. MeOH, Et_2O ; poorly sol. hexane

UV: [neutral] $\lambda_{\max}$ 436 (); 445 (); 452 () (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 450 (E1%/1cm 1140) (EtOH) (Berdy) [neutral] $\lambda_{\max}$ 444 (); 466 () (Me_2CO)

>>Derivative: 19'-Butanoyloxy, 3'-Ac

Synonym(s): 19'-Butanoyloxyfucoxanthin. 3'-Acetoxy-6',7'-didehydro-5,6-epoxy-5,5',6,6',7,8-hexahydro-3,5'-dihydroxy-8-oxo-19'-(1-oxobutoxy)- β,β -carotene

CAS Registry Number: 111234-30-1

Molecular Formula: $C_{46}H_{64}O_8$

Molecular Weight: 745.007

Accurate Mass: 744.46012

Percentage Composition: C 74.16%; H 8.66%; O 17.18%

Biological Source: Isol. from the marine crysophyte *Pelagococcus subviridis*

Physical Description: Cryst. (4-methyl-2-pentanone/hexane)

UV: [neutral] $\lambda_{\max}$ 446 (); 473 () (hexane) [neutral] $\lambda_{\max}$ 454 (); 481 () ($CHCl_3$)

>>Derivative: 19'-Hexanoyloxy, 4-oxo, 3'-Ac

CAS Registry Number: 279673-18-6

Molecular Formula: $C_{48}H_{66}O_9$

Molecular Weight: 787.044

Accurate Mass: 786.470685

Percentage Composition: C 73.25%; H 8.45%; O 18.30%

Biological Source: Constit. of *Emiliania huxleyi*

UV: [neutral] $\lambda_{\max}$ 443 (); 467 () (Me_2CO) [neutral] $\lambda_{\max}$ 455 (); 481 () (C_6H_6) [neutral] $\lambda_{\max}$ 443 (); 465 () (MeOH)

References: