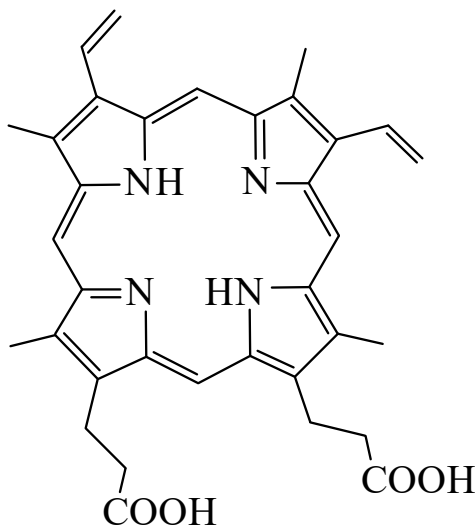




>>Entry Name: **Protoporphyrin**

Synonym(s): Protoporphyrin IX. Ooporphyrin. Lebersdan. Many other names



CAS Registry Number: 553-12-8

Related CAS Registry Numbers(s): 50865-01-5

Molecular Formula: C₃₄H₃₄N₄O₄

Molecular Weight: 562.667

Accurate Mass: 562.258006

Percentage Composition: C 72.58%; H 6.09%; N 9.96%; O 11.37%

Biological Source: Obt. by demetallation of Haemin [JYW10-S](#), occurs in small amounts in faeces. Brown pigment (Ooporphyrin) of birds' eggs

Use/Importance: Branch point in the biosynthetic pathway leading to Haem [KPW39-C](#) (by insertion of iron) and chlorophylls (by insertion of Mg and further side-chain transformation). Used to treat liver disorders, mainly as Na salt. Shows anti-HIV activity

Physical Description: Reddish-purple cryst.

Melting Point: Mp 300°

Solubility: BERDY SOL: Sol. EtOH, EtOAc, AcOH, Py; fairly sol. Et₂O, hexane; poorly sol. H₂O

Other Data: λ_{max} 408, 554 598 nmm (dication, aq. HCl)

Hazard & Toxicity: LD₅₀ (mus, ipr) 1029 mg/kg (disodium salt)

Aldrich: 28996-5

Fluka: 82505

Sigma: P8293

>>Derivative: Di-Me ester

CAS Registry Number: 5522-66-7

Molecular Formula: C₃₆H₃₈N₄O₄

Molecular Weight: 590.721

Accurate Mass: 590.289306

Percentage Composition: C 73.20%; H 6.48%; N 9.48%; O 10.83%

Physical Description: Violet cryst. (CHCl₃/MeOH)

Melting Point: Mp 233°

Other Data: λ_{max} 407, 505, 541, 575, 603, 630 nm

Aldrich: 25837-7

Fluka: 82510

Sigma: P5880

>>Derivative: Co complex

Synonym(s): Cobalt protoporphyrin

CAS Registry Number: 14325-03-2

Molecular Formula: C₃₄H₃₀CoN₄O₄

Molecular Weight: 617.569

Accurate Mass: 617.159904

Percentage Composition: C 66.13%; H 4.90%; Co 9.54%; N 9.07%; O 10.36%

Use/Importance: Haem oxygenase inhibitor