



>>Entry Name: Chlorophyll b
ENTRY UNDER REVIEW

CAS Registry Number: 519-62-0

As Chlorophyll a, [LCS34-B](#) with
 $R^1 = -CHO$, $R^2 = -CH_2CH_3$

Molecular Formula: $C_{55}H_{70}MgN_4O_6$

Molecular Weight: 907.486

Accurate Mass: 906.514578

Percentage Composition: C 72.80%; H 7.77%; Mg 2.68%; N 6.17%; O 10.58%

Biological Source: Green pigment in leaves of plants together with Chlorophyll a [LCS34-B](#)

Physical Description: Dark green powder (petrol)

Other Data: Reacts as Chlorophyll a with acids and Chlorophyllase to give similar prods., i.e. Phaeophytin b [KCT50-X](#), Phaeophorbide b [CRS68-U](#) and Me ester. Alkaline hydrol. gives Rhodin g₇ [CRS97-C](#). Other esters e.g. geranylgeranyl are found in various microorganisms

Aldrich: 25826-1

Fluka: 25740

Sigma: C5878

>>Derivative: 3'-Free acid

Synonym(s): Chlorophyllide b

CAS Registry Number: 14428-12-7

Molecular Formula: $C_{35}H_{32}MgN_4O_6$

Molecular Weight: 628.966

Accurate Mass: 628.217228

Percentage Composition: C 66.84%; H 5.13%; Mg 3.86%; N 8.91%; O 15.26%

Biological Source: Pigment from various spp.

Use/Importance: Intermed. in Chlorophyll b biosynthesis

>>Derivative: 1',2'-Didehydro

Synonym(s): Divinylchlorophyll b. 4-Desethyl-4-vinylchlorophyll b

CAS Registry Number: 89456-97-3

Molecular Formula: $C_{55}H_{68}MgN_4O_6$

Molecular Weight: 905.47

Accurate Mass: 904.498928

Percentage Composition: C 72.96%; H 7.57%; Mg 2.68%; N 6.19%; O 10.60%

Use/Importance: Biosynth. intermediate of chlorophyll b

References:

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