



>>Entry Name: Fluorenylmethylenoxycarbonylleucine

Synonym(s): *N*-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]leucine, 9Cl. FmocLeuOH

Related CAS Registry Numbers(s): 142061-94-7

Molecular Formula: C₂₁H₂₃NO₄

Molecular Weight: 353.417

Accurate Mass: 353.162709

Percentage Composition: C 71.37%; H 6.56%; N 3.96%; O 18.11%

General Statement: Deriv. of 9-Fluorenyl methyl chloroformate [DMJ03-G](#)

>>Variant: L-form

CAS Registry Number: 35661-60-0

Molecular Formula: C₂₁H₂₃NO₄

Molecular Weight: 353.417

Accurate Mass: 353.162709

Percentage Composition: C 71.37%; H 6.56%; N 3.96%; O 18.11%

Melting Point: Mp 155-156 dec.°

Optical Rotation: [α]_D²⁷ -4.44 (c, 2.5 in EtOAc)

Aldrich: 40861-1

Fluka: 47633

Sigma: F0259

>>Derivative: 4-Nitrophenyl ester

Synonym(s): FmocLeuONp

CAS Registry Number: 71989-25-8

Melting Point: Mp 115-116°

Optical Rotation: [α]_D -50 (c, 1.2 in DMF + 1% AcOH)

>>Derivative: Piperidyl ester

Synonym(s): FmocLeuOPip

CAS Registry Number: 35661-43-9

Melting Point: Mp 55 dec.°

Optical Rotation: [α]_D²⁷ -3.45 (c, 2.5 in EtOAc)

>>Derivative: Fluoride

CAS Registry Number: 130858-94-5

Molecular Formula: C₂₁H₂₂FNO₃

Molecular Weight: 355.408

Accurate Mass: 355.158372

Percentage Composition: C 70.97%; H 6.24%; F 5.35%; N 3.94%; O 13.51%

Use/Importance: Used in peptide synthesis

Melting Point: Mp 95-96°

Optical Rotation: [α]_D²³ -7.9 (c, 1 in EtOAc)

References:

Carpino, L.A. *et al.*, *J.O.C.*, 1972, **37**, 3404

Bodanszky, A. *et al.*, *J.O.C.*, 1980, **45**, 72

Carpino, L.A. *et al.*, *J.A.C.S.*, 1990, **112**, 9651-9652, (*fluoride*)