



>>Entry Name: Fluorenylmethylenoxycarbonylglutamic acid

Synonym(s): *N*-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]glutamic acid, 9Cl. FmocGluOH

Molecular Formula: C₂₀H₁₉NO₆

Molecular Weight: 369.373

Accurate Mass: 369.121239

Percentage Composition: C 65.03%; H 5.18%; N 3.79%; O 25.99%

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

>>Variant: L-form

Molecular Formula: C₂₀H₁₉NO₆

Molecular Weight: 369.373

Accurate Mass: 369.121239

Percentage Composition: C 65.03%; H 5.18%; N 3.79%; O 25.99%

>>Derivative: 5-*tert*-Butyl ester

Synonym(s): FmocGlu(OBu^{*t*})OH

CAS Registry Number: 71989-18-9

Melting Point: Mp 76-77°

Optical Rotation: [α]_D +0.8 (c, 1 in EtOAc)

Fluka: 47625

Sigma: F1758

>>Derivative: 5-*tert*-Butyl ester, 1-(4-nitrophenyl) ester

Synonym(s): FmocGlu(OBu^{*t*})ONp

CAS Registry Number: 71989-19-0

Physical Description: Oil

Optical Rotation: [α]_D²² -14 (c, 1.2 in DMF + 1% AcOH)

>>Derivative: Fluoride, 5-*tert*-butyl ester

CAS Registry Number: 130859-03-9

Molecular Formula: C₂₄H₂₆FNO₅

Molecular Weight: 427.472

Accurate Mass: 427.179502

Percentage Composition: C 67.43%; H 6.13%; F 4.44%; N 3.28%; O 18.71%

Use/Importance: Used in peptide synthesis

Physical Description: Cryst.

Melting Point: Mp 80-82°

Optical Rotation: [α]_D -11.2 (c, 0.5 in EtOAc)

References:

Chang, C.-D. *et al.*, *Int. J. Pept. Protein Res.*, 1980, **15**, 59

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

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