



>>Entry Name: Fluorenylmethylenoxycarbonylthreonine

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

Molecular Formula: C₁₉H₁₉NO₅

Molecular Weight: 341.363

Accurate Mass: 341.126324

Percentage Composition: C 66.85%; H 5.61%; N 4.10%; O 23.43%

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

>>Variant: L-form

Molecular Formula: C₁₉H₁₉NO₅

Molecular Weight: 341.363

Accurate Mass: 341.126324

Percentage Composition: C 66.85%; H 5.61%; N 4.10%; O 23.43%

>>Derivative: Benzyl ester

Synonym(s): FmocThrOBzl

CAS Registry Number: 73724-48-8

Molecular Formula: C₂₆H₂₅NO₅

Molecular Weight: 431.487

Accurate Mass: 431.173274

Percentage Composition: C 72.37%; H 5.84%; N 3.25%; O 18.54%

Melting Point: Mp 112-113°

Optical Rotation: [α]_D -6.25 (c, 1 in EtOAc)

>>Derivative: *O*-*tert*-Butyl

Synonym(s): FmocThr(Bu^{*t*})OH

CAS Registry Number: 71989-35-0

Melting Point: Mp 129-132°

Optical Rotation: [α]_D +15.5 (c, 1 in EtOAc)

Fluka: 47622

Sigma: F1508

>>Derivative: *O*-*tert*-Butyl, benzyl ester

Synonym(s): FmocThr(Bu^{*t*})OBzl

CAS Registry Number: 73724-49-9

Melting Point: Mp 69-70°

Optical Rotation: [α]_D +6.65 (c, 1 in EtOAc)

>>Derivative: *O*-*tert*-Butyl, 4-nitrophenyl ester

Synonym(s): FmocThr(Bu^{*t*})ONp

CAS Registry Number: 71989-36-1

Physical Description: Amorph. solid

Melting Point: Mp 49-53°

Optical Rotation: [α]_D²² -23.9 (c, 1.2 in DMF + 1% AcOH)

>>Derivative: *O*-*tert*-Butyl, succinimido ester

Synonym(s): FmocThr(Bu^{*t*})OSu

Melting Point: Mp 148.5-153°

Optical Rotation: [α]_D²⁵ +14.58 (c, 1 in EtOAc)

>>Derivative: *O*-*tert*-Butyl, fluoride

CAS Registry Number: 130858-99-0

Molecular Formula: C₂₃H₂₆FNO₄

Molecular Weight: 399.461

Accurate Mass: 399.184587

Percentage Composition: C 69.16%; H 6.56%; F 4.76%; N 3.51%; O 16.02%

Use/Importance: Used in peptide synthesis

Melting Point: Mp 53-55°

Optical Rotation: [α]_D²⁷ +12.3 (c, 0.4 in EtOAc)