



**>>Entry Name: Fluorenylmethylenoxycarbonylaspartic acid**

**Synonym(s):** *N*-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]aspartic acid. FmocAspOH

**Molecular Formula:** C<sub>19</sub>H<sub>17</sub>NO<sub>6</sub>

**Molecular Weight:** 355.346

**Accurate Mass:** 355.105589

**Percentage Composition:** C 64.22%; H 4.82%; N 3.94%; O 27.01%

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

**>>Variant: L-form**

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**Molecular Weight:** 355.346

**Accurate Mass:** 355.105589

**Percentage Composition:** C 64.22%; H 4.82%; N 3.94%; O 27.01%

**>>Derivative: 4-*tert*-Butyl ester**

**Synonym(s):** FmocAsp(Bu<sup>t</sup>)OH

**CAS Registry Number:** 71989-14-5

**Melting Point:** Mp 148-149°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> +9.1 (c, 1 in DMF)

**Fluka:** 47618

**Sigma:** F9132

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

**Synonym(s):** FmocAsp(Bu<sup>t</sup>)ONp

**CAS Registry Number:** 71989-15-6

**Physical Description:** Amorph. solid

**Melting Point:** Mp 45-50°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -34.2 (c, 1.2 in DMF + 1% AcOH)

**>>Derivative: 4-Benzyl ester, 1-(2,4,5-trichlorophenyl) ester**

**Synonym(s):** FmocAsp(Bzl)OTcP

**CAS Registry Number:** 71359-85-8

**Melting Point:** Mp 99-101°

**>>Derivative: Fluoride, 4-*tert*-butyl ester**

**CAS Registry Number:** 130859-01-7

**Molecular Formula:** C<sub>23</sub>H<sub>24</sub>FNO<sub>5</sub>

**Molecular Weight:** 413.445

**Accurate Mass:** 413.163852

**Percentage Composition:** C 66.82%; H 5.85%; F 4.60%; N 3.39%; O 19.35%

**Use/Importance:** Used in peptide synthesis

**Melting Point:** Mp 74-75°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>23</sup> +4 (c, 0.5 in EtOAc)

**References:**

Bodanszky, M. *et al.*, *J.O.C.*, 1979, **44**, 3596; 1980, **45**, 72

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

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