



**Melting Point:** Mp 146-148°

**Optical Rotation:**  $[\alpha]_D^{18} -36.5$  (EtOH)

>>**Derivative:** *N*-Benzyloxycarbonyl

**CAS Registry Number:** 13122-91-3

**Molecular Formula:** C<sub>26</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>

**Molecular Weight:** 446.502

**Accurate Mass:** 446.184173

**Percentage Composition:** C 69.94%; H 5.87%; N 6.27%; O 17.92%

**Physical Description:** Cryst. (EtOAc)

**Melting Point:** Mp 162-163°

>>**Derivative:** *N*-Benzyloxycarbonyl, Me ester

**CAS Registry Number:** 4892-10-8

**Molecular Formula:** C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>5</sub>

**Molecular Weight:** 460.529

**Accurate Mass:** 460.199823

**Percentage Composition:** C 70.42%; H 6.13%; N 6.08%; O 17.37%

**Physical Description:** Cryst. (MeOH)

**Melting Point:** Mp 148-149°

>>**Derivative:** *N*-Benzyloxycarbonyl, Et ester

**CAS Registry Number:** 5276-63-1

**Molecular Formula:** C<sub>28</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub>

**Molecular Weight:** 474.555

**Accurate Mass:** 474.215473

**Percentage Composition:** C 70.87%; H 6.37%; N 5.90%; O 16.86%

**Physical Description:** Cryst.

**Melting Point:** Mp 140°

#### References:

Birkinshaw, J.H. *et al.*, *Biochem. J.*, 1962, **85**, 523-527, (*synth, derivs*)

Inouye, K. *et al.*, *Biochemistry*, 1966, **5**, 2473-2483, (*synth, derivs*)

Eisele, K. *et al.*, *Z. Physiol. Chem.*, 1975, **356**, 845-854, (*N-tert-butyloxycarbonyl*)

Tomiozo, C. *et al.*, *Can. J. Chem.*, 1976, **54**, 70-76, (*cd*)

Otagiri, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1984, **57**, 90-96, (*synth, derivs*)