



Melting Point: Mp 146-148°
Optical Rotation: $[\alpha]_D^{18} -36.5$ (EtOH)

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

CAS Registry Number: 13122-91-3
Molecular Formula: $C_{26}H_{26}N_2O_5$
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: $C_{27}H_{28}N_2O_5$
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: $C_{28}H_{30}N_2O_5$
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*)