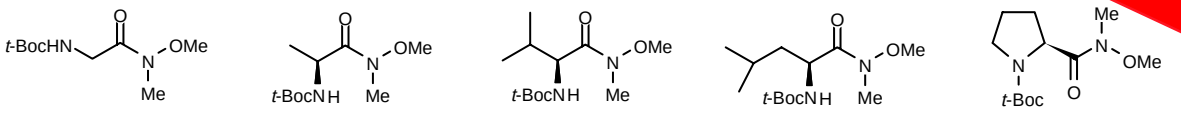
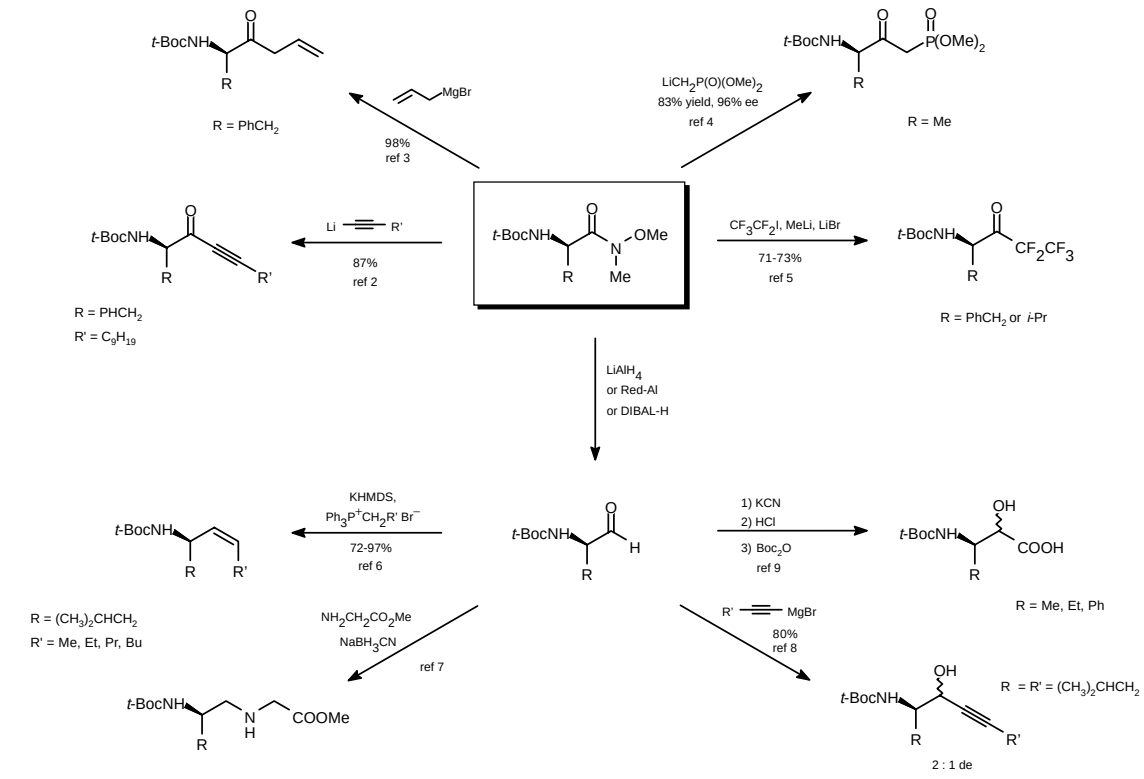
α-Amino Weinreb Amides



46,512-7	45,845-7	45,846-5	42,383-1	45,885-6

N'-Methoxy-*N'*-methylamides of α-amino acids are useful starting materials for the synthesis of chiral molecules.[1] Addition of nucleophiles gives high yields of ketones; overaddition produces little, if any, alcohols. Reduction of the amides with $LiAlH_4$, DIBAL-H, or Red-Al® produces α-amino aldehydes. Examples in which researchers have utilized these important compounds are shown below.

Aldrich now offers several optically pure, *t*-Boc protected α-amino Weinreb amides and plans to expand this line in the near future. To suggest new Weinreb amides or inquire about other *N'*-methoxy-*N'*-methylamides of α-amino acids, please call our Technical Services Department at **800-231-8327**.



46,512-7 *N*-(*tert*-**Butoxycarbonyl)glycine** *N'*-**methoxy**-*N'*-**methylamide,** 98% **1g; 5g**

45,845-7 *N*-(*tert*-**Butoxycarbonyl)-L-alanine** *N'*-**methoxy**-*N'*-**methylamide,** 98% **1g; 5g**

45,846-5 *N*-(*tert*-**Butoxycarbonyl)-L-valine** *N'*-**methoxy**-*N'*-**methylamide,** 97% **1g; 5g**

42,383-1 *N*-(*tert*-**Butoxycarbonyl)-L-leucine** *N'*-**methoxy**-*N'*-**methylamide,** 98% **1g; 5g**

45,885-6 *N*-(*tert*-**Butoxycarbonyl)-L-proline** *N'*-**methoxy**-*N'*-**methylamide,** 98% **1g; 5g**

References: (1) Nahm, S.; Weinreb, S.M. *Tetrahedron Lett.* **1981**, *22*, 3815. For a review, see: Sibi, M.P. *Org. Prep. Proc. Intl.* **1993**, *25*, 15. (2) Overhand, M.; Hecht, S.M. *J. Org. Chem.* **1994**, *59*, 4721. (3) Kim, B.M. et al. *Tetrahedron Lett.* **1994**, *35*, 5153. (4) Lucet, D. et al. *Tetrahedron: Asymmetry* **1996**, *7*, 985. (5) Angelastro, M.R. et al. *Tetrahedron Lett.* **1992**, *33*, 3265. (6) Saari, W.S.; Fischer, T.E. *Synthesis* **1990**, 453. (7) Kosynkina, L. et al. *Tetrahedron Lett.* **1994**, *35*, 5173. (8) Bohnstedt, A.C. et al. *Tetrahedron Lett.* **1993**, *34*, 5217. (9) Harbeson, S.L. et al. *J. Med. Chem.* **1994**, *37*, 2918.

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