

TMPA, TEPA, TIPMDP, DECMP

Phosphorus Specialties

Product Application Bulletin

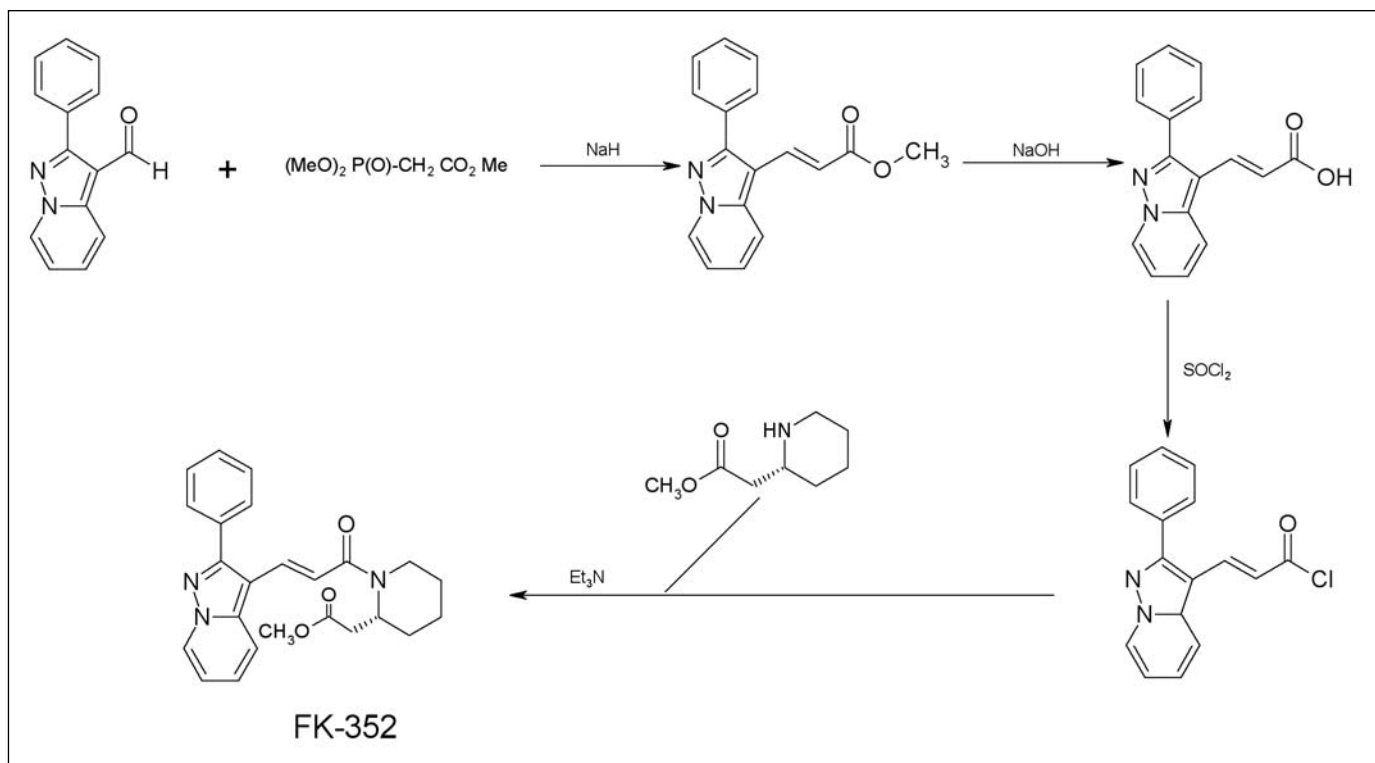
TMPA, TEPA, TIPMDP, AND DECMP AS HORNER-EMMONS-WADSWORTH (HEW) REAGENTS FOR SYNTHESIS OF THE CORRESPONDING α , β -UNSATURATED ESTERS, PHOSPONATES AND NITRILES BY REACTION WITH ALDEHYDES AND KETONES.

Product Detail

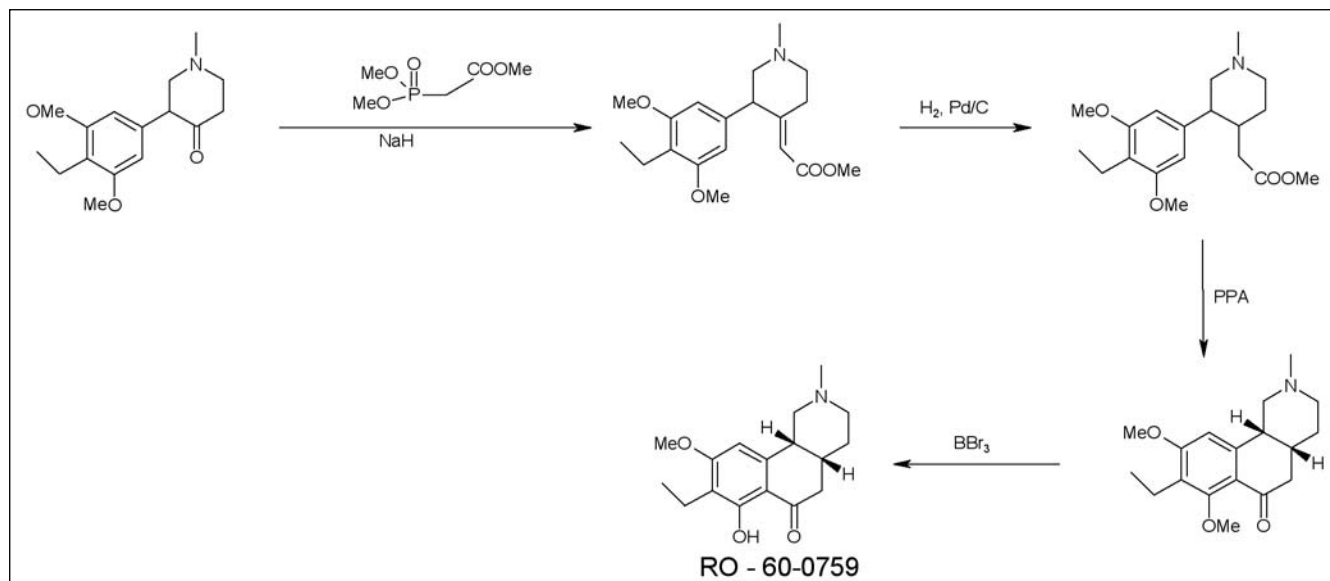
Chemical Name	Abbreviation	CAS Registry Number
Trimethyl phosphonoacetate	TMPA	5927-18-4
Triethyl phosphonoacetate	TEPA	867-13-0
Tetraisopropyl methylenediphosphonate	TIPMDP	1660-95-3
Diethyl cyanomethylphosphonate	DECMP	2537-48-6

Examples / Use:

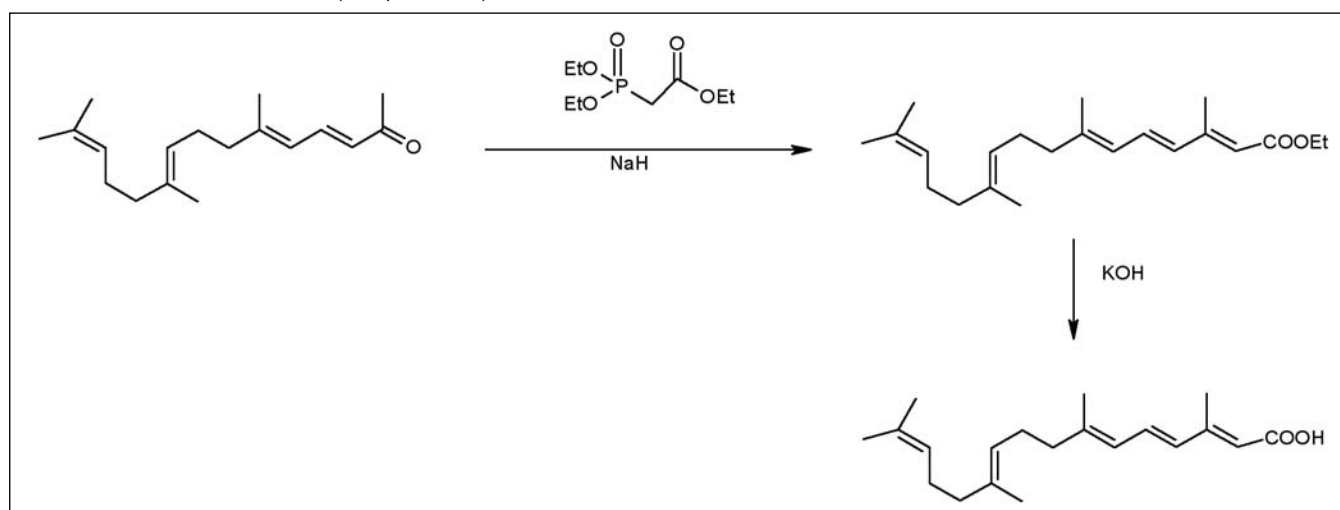
A. TMPA in Fujisawa's FK-352 (Diuretic).



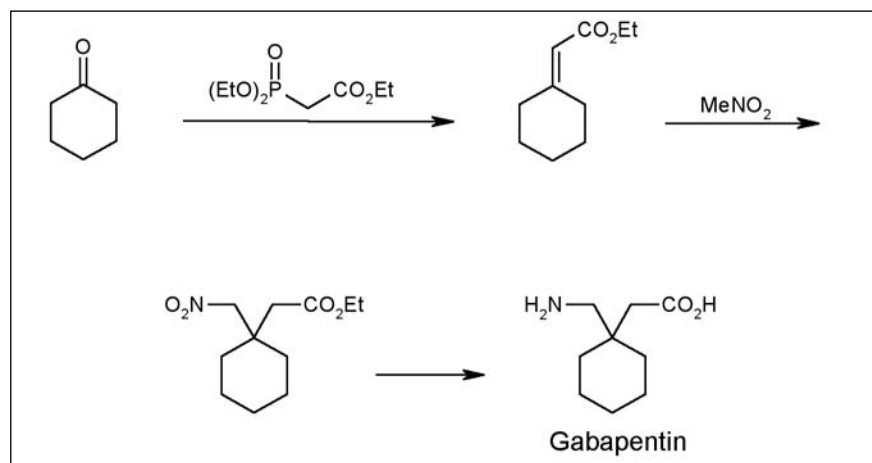
B. TMPA in Roche's RO-60-0759 (Migraine treatment).



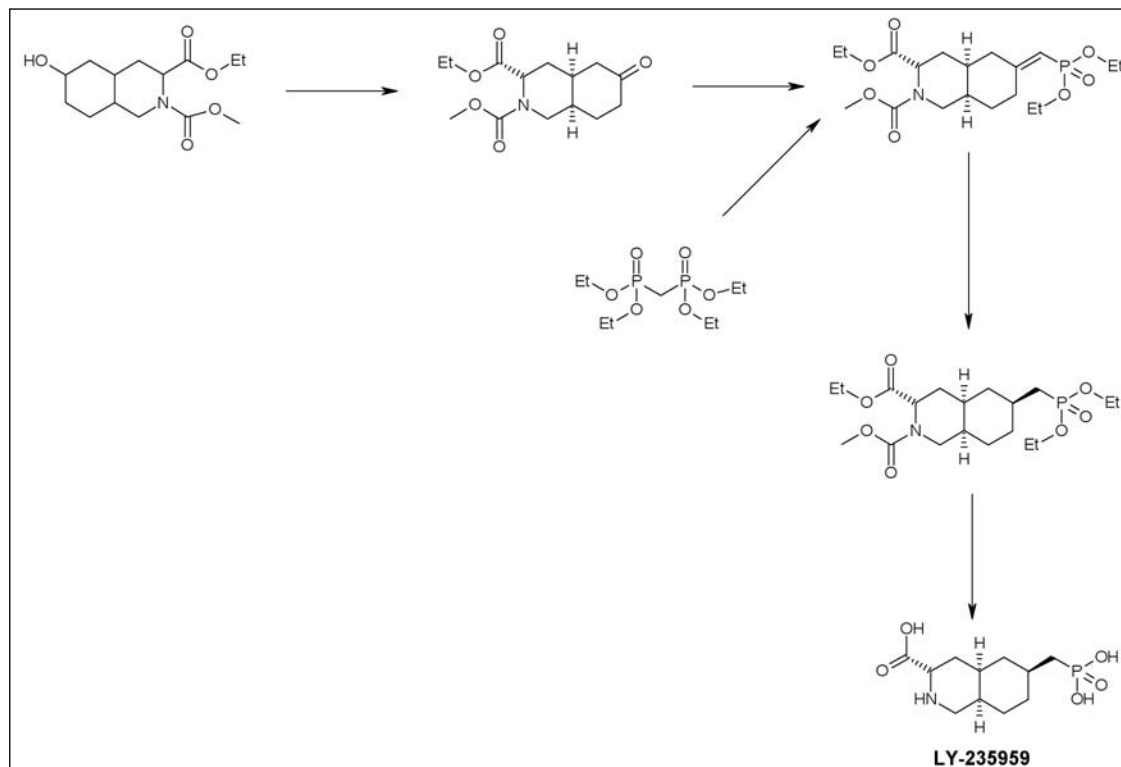
C. TEPA in Eisai's E-5166 (Antipsoriatic).



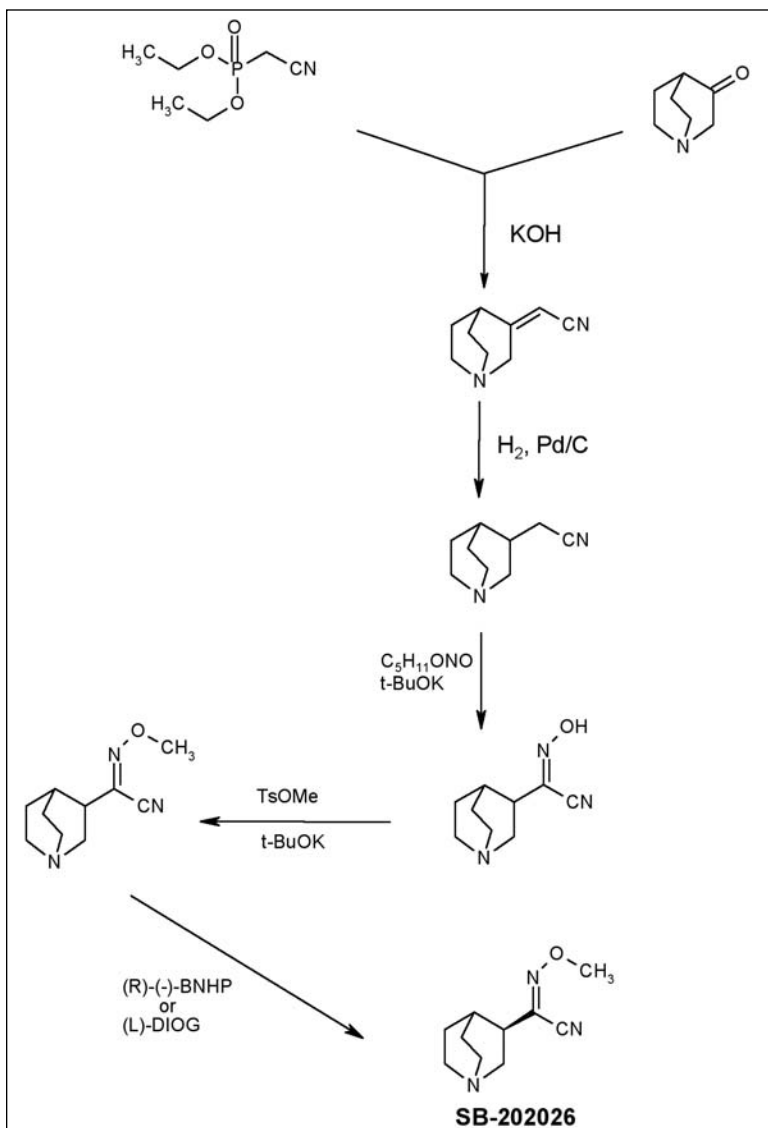
D. TEPA in Gabapentin (Anticonvulsant).



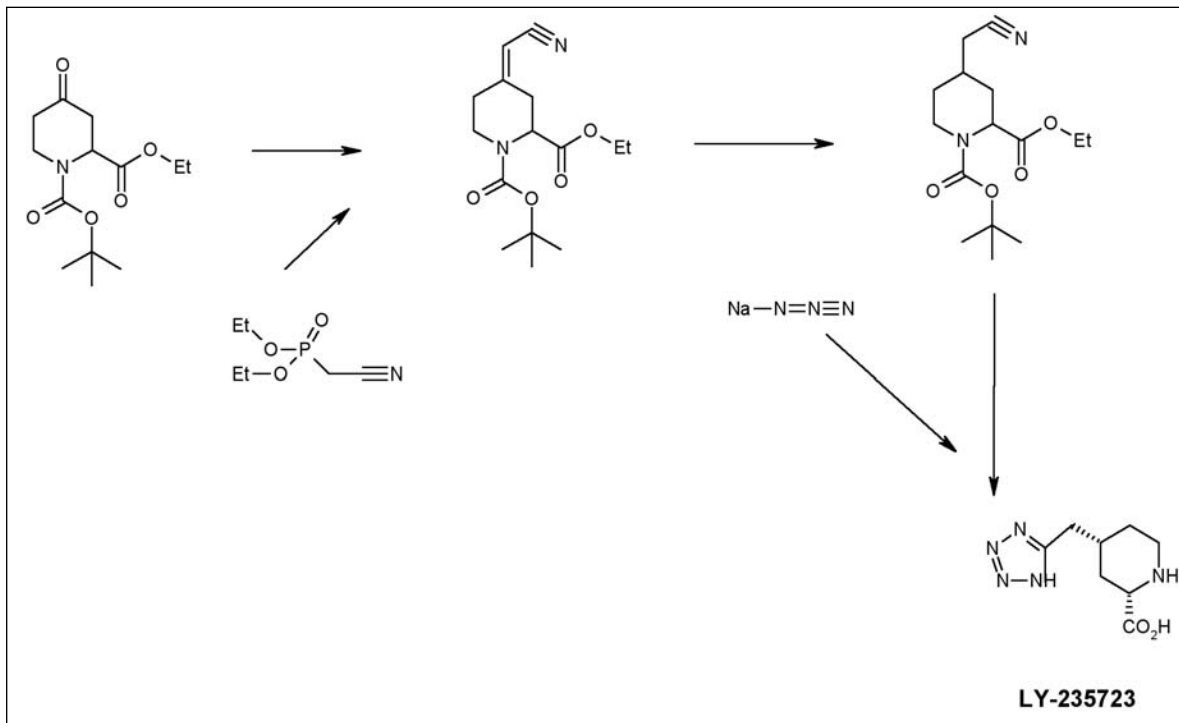
E. TIPMDP (illustrated with TEMDP) in Lilly's LY235959 (Drug addition).



F. DECMP in SB-202026 (Alzheimer's disease).



G. DECMP in Lilly's LY-235723 (Nervous system disorder).



SUMMARY

THERAPEUTIC AREA:

Use not restricted to any specific therapeutic area.

FUNCTIONALITY:

Building Block

REFERENCES

- Drugs of the Future 1997, 22(4), 350-352
- WO 98/ 30546 (1998); US 6,310,208 (2001)
- US 4,917,829 (1990)
- WO 99/ 14184 (1999); US 5,091,567 (1992)
- US 4,902,695 (1990)
- Drugs of the Future 1998, 23(1), 41-44
- EP 330353 B (1993)

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