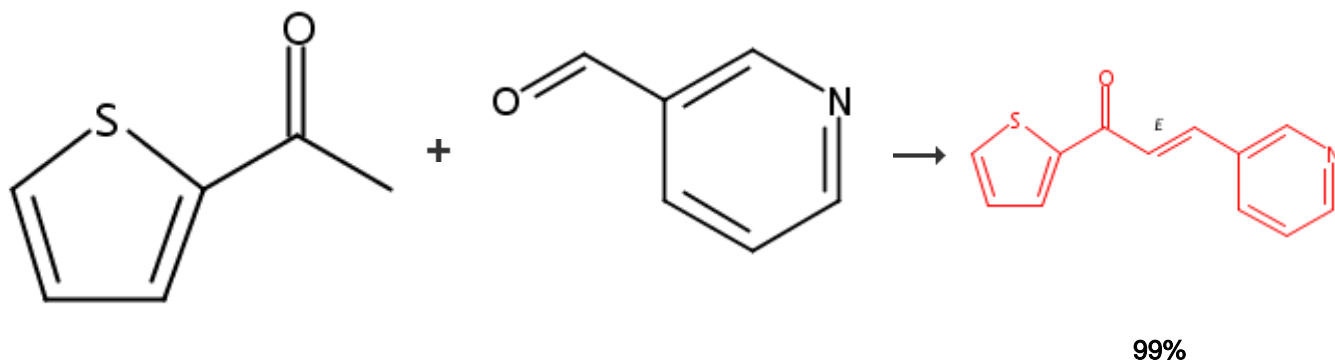


1. Single Step

[Overview](#)

Steps/Stages

1.1 R:KOH, S:H₂O, S:MeOH, 10 min, 0°C; 3 h, 0°C

Notes

stereoselective, Reactants: 2, Reagents: 1, Solvents: 2, Steps: 1, Stages: 1, Most stages in any one step: 1

References

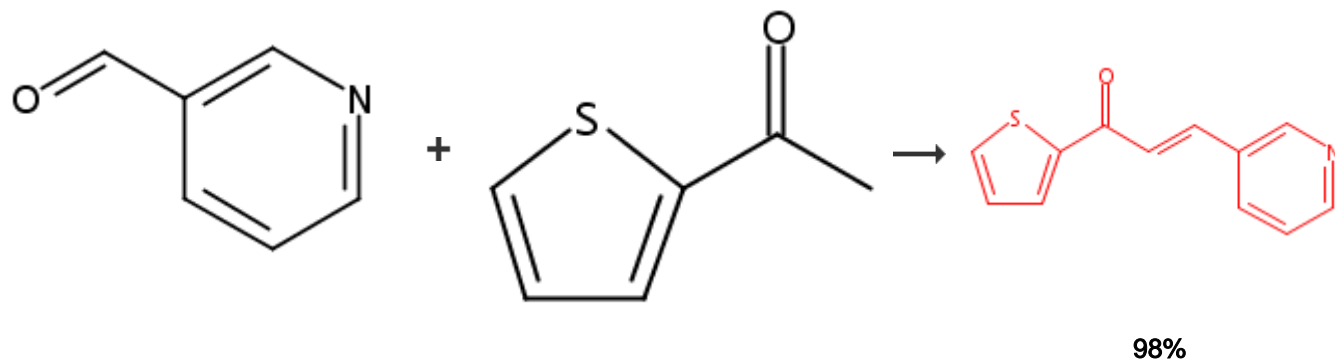
[2,6-Dithienyl-4-arylpyridines: Synthesis, topoisomerase I and II inhibition and structure-activity relationship](#)

By Thapa, Pritam et al

From Bulletin of the Korean Chemical Society, 29(8), 1605-1608; 2008

CASREACT®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.

2. Single Step

[Overview](#)

Steps/Stages

1.1 R:KOH, S:H₂O, S:MeOH, 0°C
1.2 10 min, 0°C; 3 h, 0°C

Notes

Reactants: 2, Reagents: 1, Solvents: 2, Steps: 1, Stages: 2, Most stages in any one step: 2

References

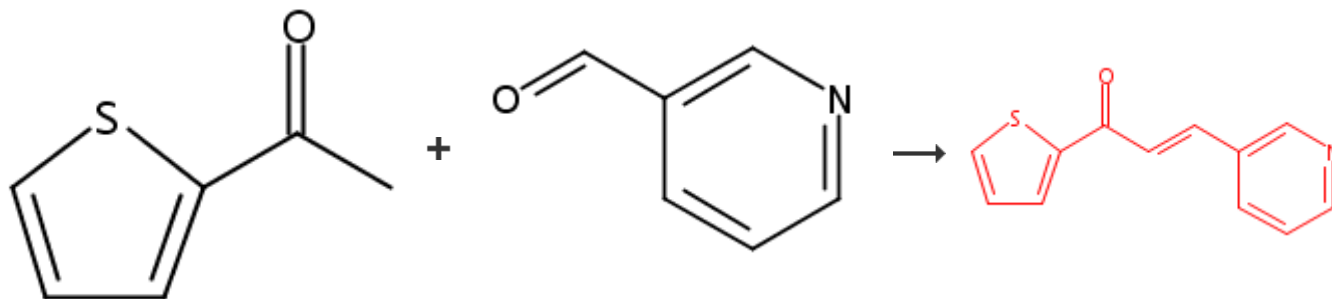
[2,4,6-Trisubstituted pyridines: Synthesis, topoisomerase I and II inhibitory activity, cytotoxicity, and structure-activity relationship](#)

By Basnet, Arjun et al

From Bioorganic & Medicinal Chemistry, 15(13), 4351-4359; 2007

CASREACT®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.

3. Single Step



47%

[Overview](#)

Steps/Stages

1.1 R:KOH, S:H₂O, S:MeOH, 10 min, 0°C; 3 h, 0°C

Notes

Reactants: 2, Reagents: 1, Solvents: 2, Steps: 1, Stages: 1, Most stages in any one step: 1

References

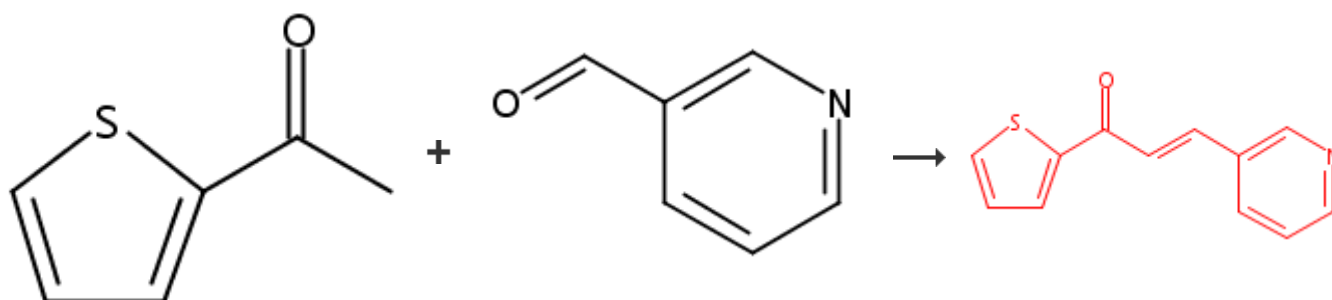
[Synthesis of pyridine derivatives and composition comprising them for prevention and treatment of cancer disease](#)

By Lee, Eung Seok et al

From *Repub. Korean Kongkae Taeho Kongbo*, 2007095016, 28 Sep 2007

CASREACT®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.

4. Single Step



51%

[Overview](#)

Steps/Stages

Notes

- 1.1 R:NaOH, S:H₂O
- 1.2 R:(CO₂H)₂, S:H₂O

Reactants: 2, Reagents: 2, Solvents: 1, Steps: 1, Stages: 2, Most stages in any one step: 2

References

[Multicyclic pyridines. Part 6. Synthesis of new heterocycle substituted 2-thioxo-1,2-dihydropyridine-3-carbonitriles](#)

By Vieweg, H. et al

From Pharmazie, 44(9), 639-40; 1989

CASREACT®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.