One-pot, three-component synthesis of 12-(1-alkylhydroquinolin-6-yl)benzimidazoquinazolinones

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Abstract

New benzimidazoquinazolinone derivatives are synthesized via a one-pot, three-component reaction of 1-alkylhydroquinoline-6-carbaldehyde, 2-aminobenzimidazole, and cyclohexane-1,3-dione compound. The products were obtained in high yields within 5-10 minutes in refluxing N,N-dimethylformamide. The newly synthesized compounds were characterized by ¹H-NMR, and elemental analysis techniques.