

Short Note

N-[(9-Ethyl-9*H*-carbazol-3-yl)methylene]-3,4-dimethylisoxazol-5-amine

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Abstract: The title compound, *N*-[(9-ethyl-9*H*-carbazol-3-yl)methylene]-3,4-dimethylisoxazol-5-amine has been synthesized by reaction of 9-ethyl-9*H*-carbazole-3carbaldehyde with 5-amino-3,4-dimethylisoxazole in the presence of acetic acid in ethanol. The structure of this new compound was confirmed by elemental analysis, IR, ¹H-NMR, ¹³C-NMR and EI-MS spectral analysis.

Keywords: carbazole; Schiff base; isooxazole

Schiff base compounds are generally known due to the azomethine group present. These compounds are usually synthesized by condensation of primary amines and active carbonyl groups. Schiff bases are an important class of compounds in the medicinal and pharmaceutical field. They show biological applications including antibacterial [1], antifungal [2], anticancer [3], anti-inflammatory [4] and antitumor activity [5]. Heterocycle-containing derivatives of Schiff bases are known to possess a variety of biological activities such as CNS depressant, anticancer [6], antibiotic [7], antihistaminic [8], anticonvulsant [9] and many others. Due to the wide application of hetrocyclic Schiff bases, we undertook the synthesis of a new heterocyclic Schiff base from a carbazole aldehyde and 5-amino-3,4-dimethylisoxazole.