REACTIONS OF INDOLES WITH IODINE AZIDE

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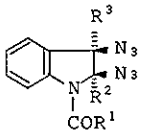
The reactions of iodine azide (IN_3) with a wide variety of olefins have been a subject of numeruous studies in recent years. We are investigating the reaction of indole derivatives with IN_3 in order to determine the effect of the heteroatom directly attached to a double bond. We report here that indoles on reacting with IN_3 afford various kinds of products depending upon the position and nature of the substituents; 1-acyl-cis-and trans-2,3-diazidoindolines (2 and 3) from 1-acylindoles, 3-azidoindolenines (9) from 2-phenylindoles, 2-azidomethylindoles (15) from 2-methylindoles, and 3a-azidofuro-and pyrrolo[2,3-b]indoles (18) from a tryptophol and tryptamine, respectively. Some chemical properties of these products are also reported.



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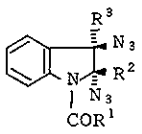

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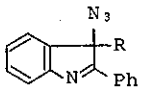

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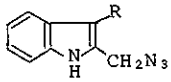

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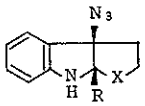

(X=O, NAc)

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