

変異原性・発がん性複素環アミン類の合成研究

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Synthetic Studies of Mutagenic and Carcinogenic Heterocyclic Amines

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ABSTRACT : A variety of mutagenic and carcinogenic heterocyclic amines are known to be formed when amino acids are pyrolyzed or protein-containing foods are cooked at high temperature. Among these heterocyclic amines, we here describe our synthetic studies of Trp-P-1 and Trp-P-2, A α C and MeA α C, and PhIP and DMIP based on the electrocyclic reaction of aza-6 π -electron system involving the indole 2,3-bond or imidazole 4,5-bond.

抄録 芳香環あるいは複素芳香環の2 π 電子を組み込んだ6 π 電子系電子環状反応のうち、アザ6 π 電子系電子環状反応を変異原性・発がん性複素環アミンであるTrp-P-1およびTrp-P-2、A α CおよびMeA α C、PhIPおよびDMIPの三種6化合物の分子設計に活用した結果をまとめた。