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Isocoumarin Derivative as a Novel GABA Receptor Ligand from *Neosartorya quadricincta*

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Abstract:
For the purpose of discovering GABA receptor-directed insecticides in natural products, fungal culture extracts were screened for their ability to inhibit the specific binding of the noncompetitive antagonist [^{3}H]EBOB to housefly head membranes. The screening efforts led to the isolation of a derivative of dihydroisocoumarin (PF1223) from the culture of *Neosartorya quadricincta*. This compound at 2.2 μM inhibited [^{3}H]EBOB binding by 65%. This ligand might prove to be a lead compound for the identification of novel insecticides acting at the insect GABA receptor.

Keywords:
GABA receptor, ligand, isocoumarin, *Neosartorya quadricincta*

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