

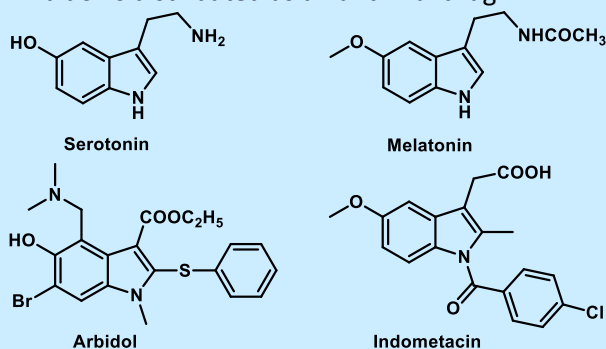
Methyl trifluoropyruvate(abb.MTFP)

トリフルオロピルビン酸メチル



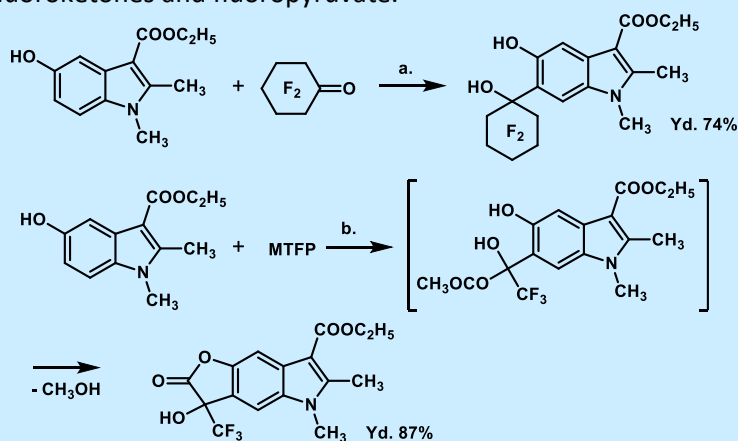
Purity	98%
CAS Number	13089-11-7
Molecular Formula	C4H3F3O3
Molecular Weight	156.06

5-Oxindoles (5-OIs) are known as physiologically active substances with neurological effects, such as serotonin and melatonin. Indometacin is also used as an anti-inflammatory agent, and dimecarbaine is used to treat hypotension. Arbidol is distributed as an antiviral drug.



Application

Although it has been widely accepted that introduction of a fluoroalkyl group improves lipophilicity and changes membrane permeability, a method for introducing a substituent containing fluorine in one step has not been reported. Ethyl 5-oxy-1H-indol-3-yl-carboxylate (1); We have found that fluoroalkyl groups can be introduced into dimecarbaine in good yields by using fluoroketones and fluoropyruvate.



- a. (1), CH₃COOH, cyclo-C₆F₁₀, 120°C*1hr, CH₃NO₂ recrystallize
 b. (1), CH₃COOH, MTFP, 120°C*1hr, CH₃COOH and C₆H₆ wash

Fluorine Notes, 150, 5, 2023

Properties:

Appearance	Liquid
Boiling point, °C	87-88