



**STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)**

Substance: 2b-Carbomethoxy-3b-(4-fluorophenyl)-N-(3-tributyltin-E-allyl) nortropane

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled   
Not Controlled

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

- The chemical is currently not listed specifically on the CDSA.
- The chemical has been referred to as cocaine analogues probably because they share a tropane core structure with cocaine
- The substance is not a derivative of ecgonine

Supporting document(s) attached: **X**

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DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

## Drug Status Report

**Drug:** Tropane related substances

2b-Carbomethoxy-3b-(4-fluorophenyl)-N-allyl nortropane (I)

2b-Carbomethoxy-3b-(4-fluorophenyl)-N-(3-iodo-E-allyl) nortropane (II)

2b-Carbomethoxy-3b-(4-fluorophenyl)-N-(3-tributyltin-E-allyl) nortropane (III)

**Drug Name Status:** The above names are common names.

**Chemical Name: (I)**

3-(4-Fluorophenyl)-8-[2-propenyl]-8-azabicyclo[3.2.1]octane-2-carboxylic acid methyl ester

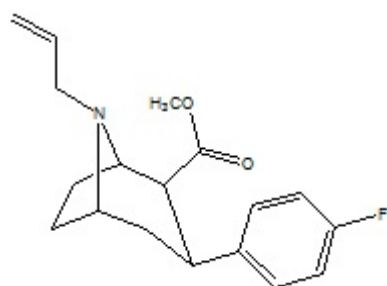
(II)

3-(4-Fluorophenyl)-8-[(2E)-3-(iodo-2-propenyl)]-8-azabicyclo[3.2.1]octane-2-carboxylic acid methyl ester

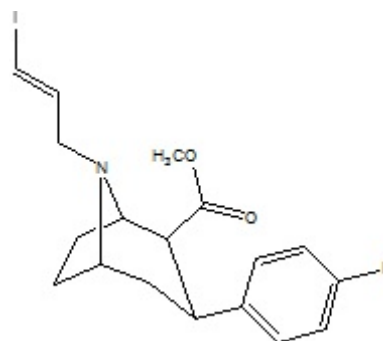
(III)

3-(4-Fluorophenyl)-8-[(2E)-3-(tributyltin-2-propenyl)]-8-azabicyclo[3.2.1]octane-2-carboxylic acid methyl ester

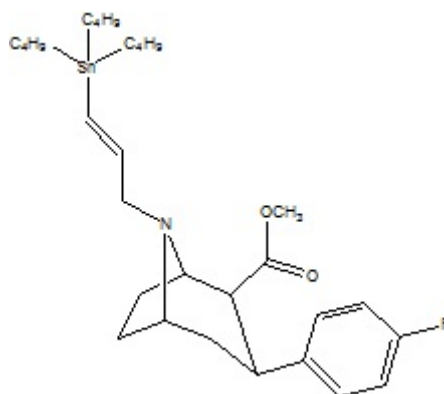
**Chemical structure:**



I



II



III

**Molecular Formula:** (I)  $C_{18}H_{22}FNO_2$

(II)  $C_{18}H_{21}FINO_2$

(III)  $C_3H_{54}FNO_2Sn$

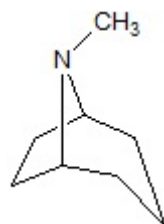
**Pharmacological class / Application:** dopamine transporter ligand

**International status:**

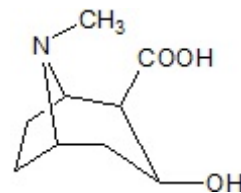
US: The chemicals are not currently listed on the US Controlled Substances Act and are not mentioned on the DEA website.

United Nations: The chemicals are not listed on the Yellow List - List of Narcotic Drugs under International Control nor on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: The chemicals are currently not listed specifically on the CDSA. The chemicals have been referred to as cocaine analogues probably because they share a tropane core structure with cocaine. The structures of tropane and ecgonine, the root structure of coca alkaloids, are shown below.



Tropane



Ecgonine

Item I (2) of the Schedule to the CDSA is: “Coca (Erythroxylo), its preparations, derivatives, alkaloids and salts, including:

I.2.(1) Coca leaves

I.2.(2) Cocaine (Benzoylmethylecgonine)

I.2.(3) Ecgonine (3-Hydroxy-2-tropane carboxylic acid)”.

The substances I, II and III are not derivatives of ecgonine.

A decision was made in May, 2003 that other similar substances in this class were also not controlled substances.

**Recommendation:** Based on the information available, substances I, II and III are not included in the schedules to the CDSA and are not controlled substances.

January 17, 2006