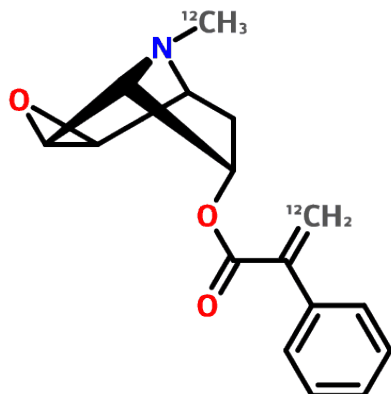


## Apohyoscyne



### 6,7 $\beta$ -Epoxy-3 $\alpha$ -atropylxytropane

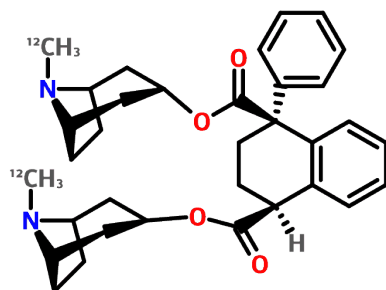
$\text{C}_{17}\text{H}_{19}\text{NO}_3$

[535-26-2]

Mol. wt 285.34

Found in the aerial parts of *Datura meteloides*, *Duboisia myoporoides* and *Hyoscyamus niger* (Solanaceae).

## Belladonnine



### Tropylisatropate

$\text{C}_{34}\text{H}_{20}\text{N}_2\text{O}_4$

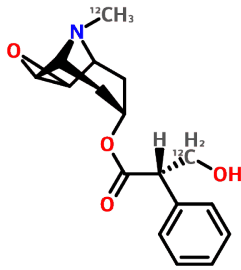
[510-25-8]

Mol. wt 542.72

Found in berries of *Hyoscyamus niger* ( $\alpha$ -form), *Physochliana alaica* ( $\beta$ -form) and *Atropa belladonna* (Solanaceae). This is also a thermal dimerisation product of apoatropine (q.v.), so that there is some question as to whether its occurrence may be artefactual. It is found in both the *trans* (1*RS*,4*SR*)-form ( $\alpha$ -belladonnine) [5878-33-1] and *cis* (1*RS*,4*RS*)-form ( $\beta$ -belladonnine) [6696-63-5].

Local anaesthetic potentiator.

## Hyoscyne



### 6,7-Epoxytropine tropate; Scopine tropate; Scopolamine

C<sub>17</sub>H<sub>21</sub>NO<sub>4</sub>

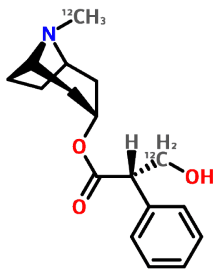
[51-34-3]

Mol. wt 303.36

Found in henbane, *Hyoscyamus niger*, *Datura metel*, *D. innoxia*, *Scopolia carniolica*, *Anthocercis viscosa*, *A. fasciculata* (Solanaceae).

Anticholinergic, with both central and peripheral actions. A particular use is as an antispasmodic, for motion sickness. It is also used as a pre-operative medication to sedate, reduce secretions, produce amnesia, assist the induction of anaesthesia and reduce some of its side-effects

## Hyoscyamine



### Daturine, Duboisine

C<sub>17</sub>H<sub>23</sub>NO<sub>3</sub>

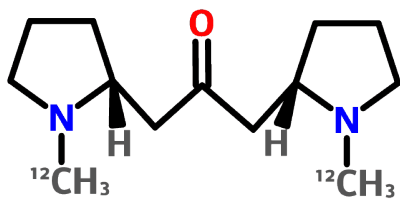
[101-31-5]

Mol. wt 289.37

Occurs in henbane and Egyptian henbane, *Hyoscyamus niger* and *Hyoscyamus muticus*, deadly nightshade, *Atropa belladonna*, thornapple, *Datura stramonium*, *Duboisia myoporoides*, and other Solanaceae.

Anticholinergic with actions similar to but more potent than those of atropine (q.v.), which is the racemate; it causes central nervous system depression followed by stimulation. It is mydriatic, anti-emetic, antispasmodic, and anti-secretory for saliva, perspiration and gastric secretions, and therefore useful as a premedication before anaesthesia; also it has been used to treat symptoms of Parkinsons' disease. Toxic to humans.

## Cuscohygrine



### Cuskygrine, Hellaridine

C<sub>13</sub>H<sub>24</sub>N<sub>2</sub>O

[454-14-8]

Mol. wt 224.35

Common in the Solanaceae, e.g., in *Hyoscyamus niger*, *Atropa belladonna* (roots) and in *Datura* spp. and *Scopolia* spp.. It co-occurs with cocaine (q.v.) in *Erythroxylum coca* (Erythroxylaceae), and it also found in *Convolvulus erinaceus* (Convolvulaceae).

Inhibitor of 2,4-dinitrofluorobenzene-induced hypersensitivity in mice. Several of the above plants are used in folk medicine as sedatives or narcotics.