

## Cytisine Datasheet

5<sup>th</sup> Edition (Revised in January, 2017)

### [ Product Information ]

**Name:** Cytisine

**Catalog No.:** CFN99513

**Cas No.:** 485-35-8

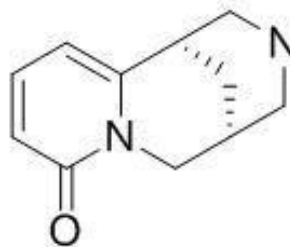
**Purity:** >=98%

**M.F:** C<sub>11</sub>H<sub>14</sub>N<sub>2</sub>O

**M.W:** 190.24

**Physical Description:** Powder

**Synonyms:** 1,2,3,4,5,6-Hexahydro-1,5-methano-8H-pyrido[1,2-a][1,5]diazocin-8-one; Lupinidine.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Others.

### [ Source ]

The herbs of *Genista tinctoria L.*

## **[ Biological Activity or Inhibitors ]**

Cytisine has been licensed in Eastern Europe as an aid to smoking cessation for 40 years, it is a partial agonist with high affinity binding to the  $\alpha 4\beta 2$  nicotinic acetylcholine receptor believed to be central to the rewarding effect of nicotine. <sup>[1]</sup>

Cytisine, a partial agonist at  $\alpha 4/\beta 2$  nAChRs, and a full agonist at  $\alpha 3/\beta 4$  and  $\alpha 7$  nAChRs, has antidepressant-like properties in several rodent models of antidepressant efficacy.<sup>[2]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

## **[ HPLC Method ]<sup>[3]</sup>**

Mobile phase: Acetonitrile-0.05 M Potassium dihydrogen phosphate solution(containing 2.0 mL·L<sup>-1</sup> triethylamine) =90:10 ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 311 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Zatonski W, Cedzynska M, Tutka P, *et al. Tobacco Control*, 2006, 15(6):481-4.

[2] Mineur Y S, Eibl C, Young G, *et al. J.Pharmacol.Exp.Ther.*, 2009, 329(1):377-86.

[3] Wang J, Ma L, Liu L, *et al. Chinese Journal of Pharmaceutical Analysis*, 2011, 31(1): 148-50.

## **[ Contact ]**

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