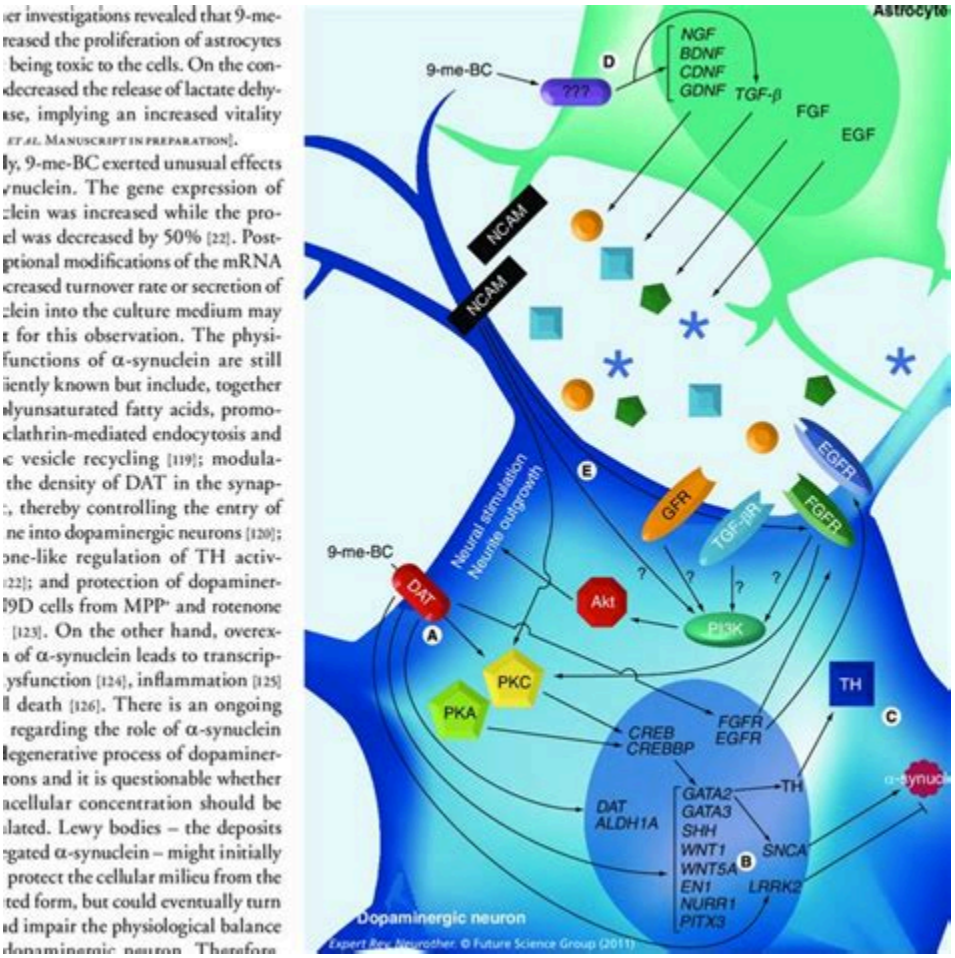
A synthetic derivative, 9-methyl-β-carboline, has shown neuroprotective effects including increased expression of neurotrophic factors and enhanced respiratory chain activity. [10] [11] This derivative has also been shown to enhance cognitive function, [12] increase dopaminergic neuron count and facilitate synaptic and dendritic proliferation.

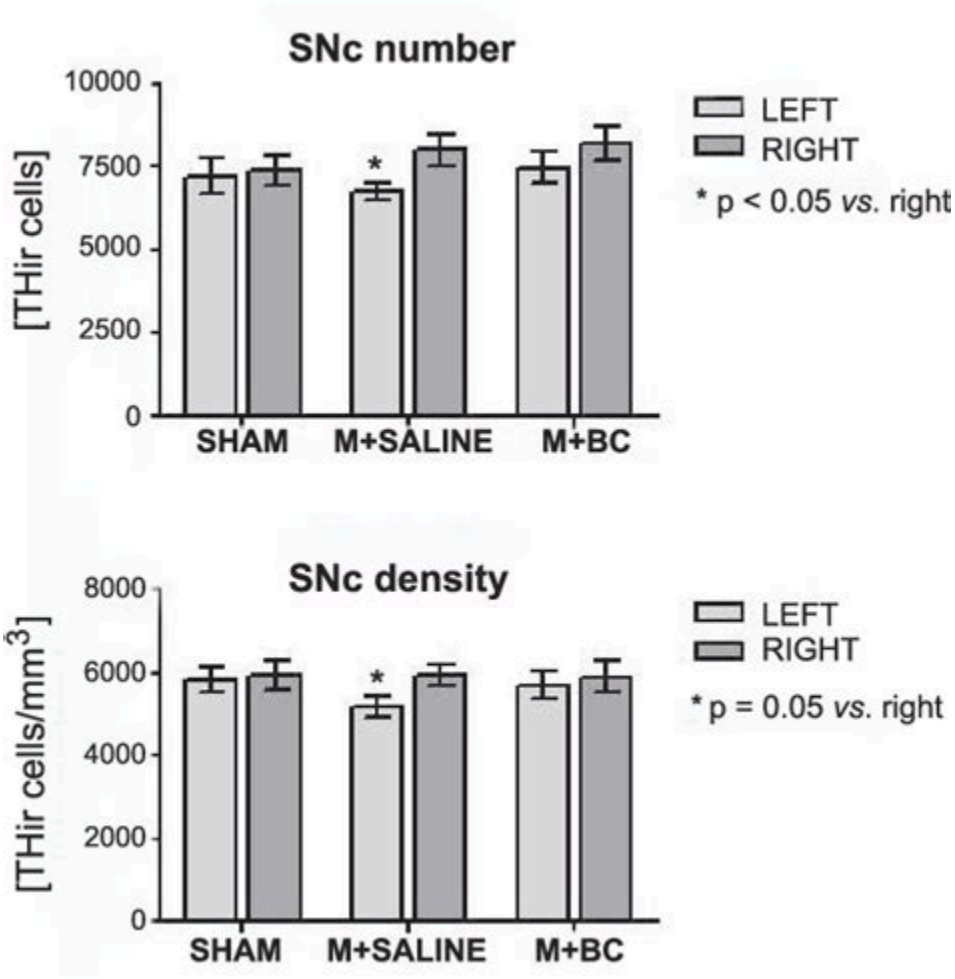
SHOP OUR ONLINE STORE

9-Methyl-β-carboline-induced cognitive enhancement is . - PubMed



9-me-BC (9-methyl-β-carboline) is a part of the β-Carboline family of pyridoindoles, synthesized from tryptophan or tryptophan-like indoleamines. 1

9-Methyl-beta-carboline has restorative effects in an animal model of .



9-Methyl-beta-carboline (9-me-BC) is a research chemical that has shown potential for enhancing cognitive function. It's still relatively new on the market, but early studies suggest it could be a powerful tool in your arsenal for boosting productivity and mental performance.

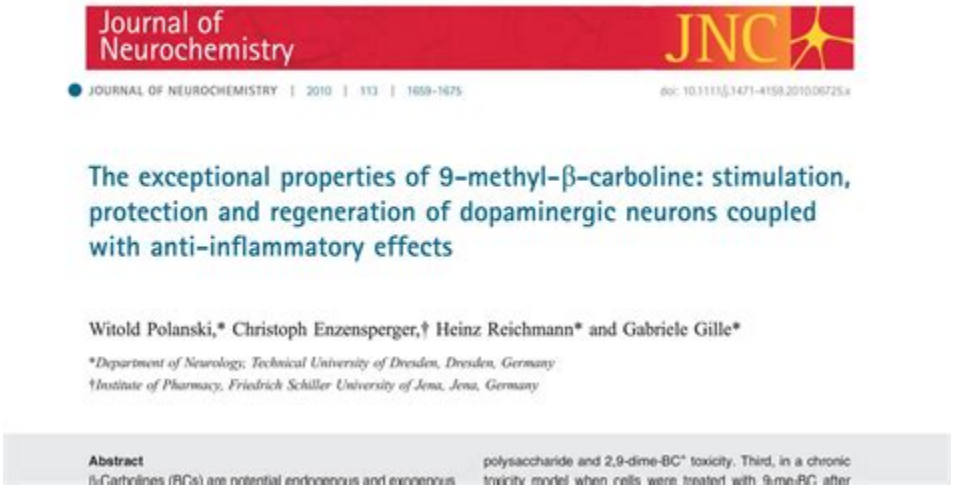
9-Me-BC | Buy High-Quality 9-Me-BC Powder - 500mg | Chemyo

Increased beta-carboline 9N-methyltransferase activity in the frontal cortex in Parkinson's disease. Neurobiol. Dis. (2000) . N-Methyl-β-carboline (βC) alkaloids, including normelinonine F (1b) and melinonine F (2b), have been found in a vast range of living species playing different biological, biomedical and/or pharmacological roles .

9-Me-BC - Health benefits, side effects, how to use, and more!

Recently, 9-methyl-β-carboline (9-me-BC) was identified as a BC with unexpected stimulatory effects on dopaminergic neurons (Hamann et al. 2008). It was transported via the DAT and increased the number of tyrosine hydroxylase (TH) positive cells by approximately 20%, whereas the total cell number remained unchanged.

The exceptional properties of 9-methyl-beta-carboline: stimulation .



Journal of Neurochemistry JNC

JOURNAL OF NEUROCHEMISTRY | 2010 | 113 | 1659–1675 doi: 10.1111/j.1471-4159.2010.06725.x

The exceptional properties of 9-methyl-β-carboline: stimulation, protection and regeneration of dopaminergic neurons coupled with anti-inflammatory effects

Witold Polanski,* Christoph Enzensperger,† Heinz Reichmann* and Gabriele Gille*

*Department of Neurology, Technical University of Dresden, Dresden, Germany
†Institute of Pharmacy, Friedrich Schiller University of Jena, Jena, Germany

Abstract

β-Carbolines (BCs) are potential endogenous and exogenous polysaccharide and 2,9-dime-BC⁺ toxicity. Third, in a chronic toxicity model when cells were treated with 9-me-BC after

9-Methyl-beta-carboline up-regulates the appearance of differentiated dopaminergic neurones in primary mesencephalic culture 9-Methyl-beta-carboline up-regulates the appearance of differentiated dopaminergic neurones in primary mesencephalic culture Mar-Apr 2008;52 (4-5):688-700. doi: 10. 1016/j. neuint. 2007. 08. 018. Epub 2007 Sep 4.

9-Methyl-β-carboline-induced cognitive enhancement is associated with .

Journal of Neurochemistry JNC

JOURNAL OF NEUROCHEMISTRY | 2012 | 121 | 924–931 doi: 10.1111/j.1471-4159.2012.07713.x

ORIGINAL ARTICLE

9-Methyl-β-carboline-induced cognitive enhancement is associated with elevated hippocampal dopamine levels and dendritic and synaptic proliferation

Michael Gruss,*[,1] Dorothea Appenroth,†[,1] Armin Flubacher,*¶[,1] Christoph Enzensperger,‡ Jörg Bock,*[,**] Christian Fleck,† Gabriele Gille,§[,1] and Katharina Braun*[,**,1]

*Otto von Guericke University Magdeburg, Institute of Biology, Magdeburg, Germany
†Friedrich Schiller University of Jena, Institute of Pharmacology and Toxicology, Jena, Germany
‡Friedrich Schiller University of Jena, Institute of Pharmacy, Jena, Germany
§Technical University of Dresden, Department of Neurology, Dresden, Germany
¶German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany
**Center for Behavioral Brain Sciences, Magdeburg, Germany

Abstract

β-Carbolines (BCs) belong to the heterogenous family of carbolines, which have been found exogenously, that is, in various fruits, meats, tobacco smoke, alcohol and coffee, but also endogenously, that is, blood, brain and CSF. These exogenous and endogenous BCs and some of their metabolites can exert neurotoxic effects, however, an unexpected stimulatory effect of 9-methyl-β-carboline (9-me-BC) on dopaminergic neurons in primary mesencephalic cultures was recently discovered. The aim of the present study was to extend our knowledge on the stimulatory effects of 9-me-BC and to test the hypothesis that 9-me-BC may act as a cognitive enhancer. We found that 10 days (but not 5 days) of pharmacological treatment with 9-me-BC (i) improves spatial learning in the radial maze, (ii) elevates dopamine levels in the hippocampal formation, and (iii) results after 10 days of treatment in elongated, more complex dendritic trees and higher spine numbers on granule neurons in the dentate gyrus of 9-me-BC-treated rats. Our results demonstrate that beyond its neuroprotective/neurorestorative and anti-inflammatory effects, 9-me-BC acts as a cognitive enhancer in a hippocampus-dependent task, and that the behavioral effects may be associated with a stimulatory impact on hippocampal dopamine levels and dendritic and synaptic proliferation.

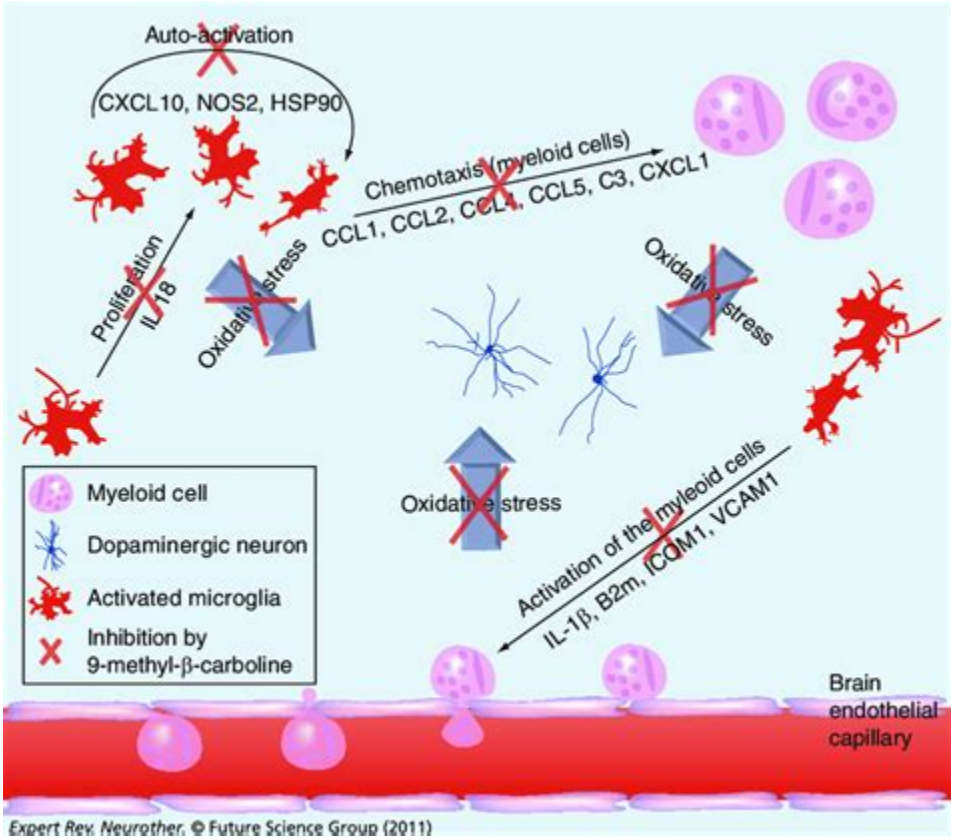
Keywords: dendritic plasticity, HPLC, spatial learning, synaptic plasticity.

J. Neurochem. (2012) **121**, 924–931.

Read the Editorial Highlight for this article on page 841.

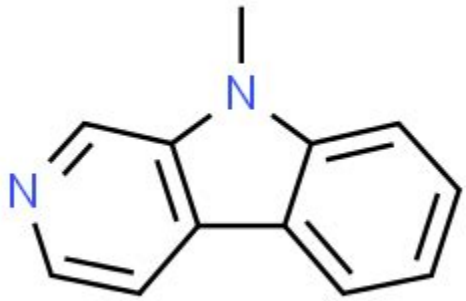
9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates the expression of neurotrophic factors by astrocytes - PMC Journal List Springer Open Choice PMC8592951 As a library, NLM provides access to scientific literature.

9-Methyl-β-carboline up-regulates the appearance of differentiated .



This suggests that 9-methyl-β-carboline acts as a cognitive enhancer in a hippocampus-dependent task and that the behavioral effects may be associated with a stimulatory impact on hippocampal dopamine levels and dendritic and . Beta-carbolines and convulsant benzodiazepine Ro 5-3663 Methods of Generation. Among beta-carbolines (Collins and .

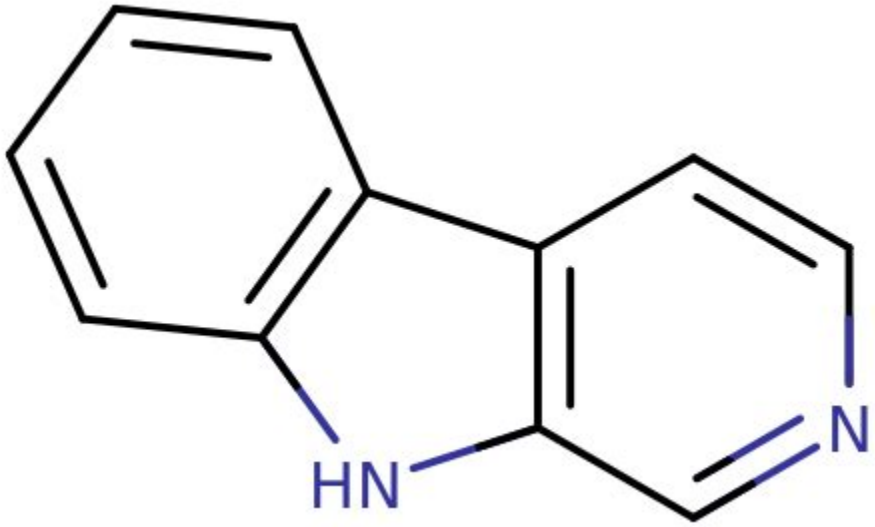
9-Methyl-beta-carboline up-regulates the appearance of differentiated .



Interestingly, 9-methyl-beta-carboline reversed the dopamine-lowering effect of the neurotoxin in the

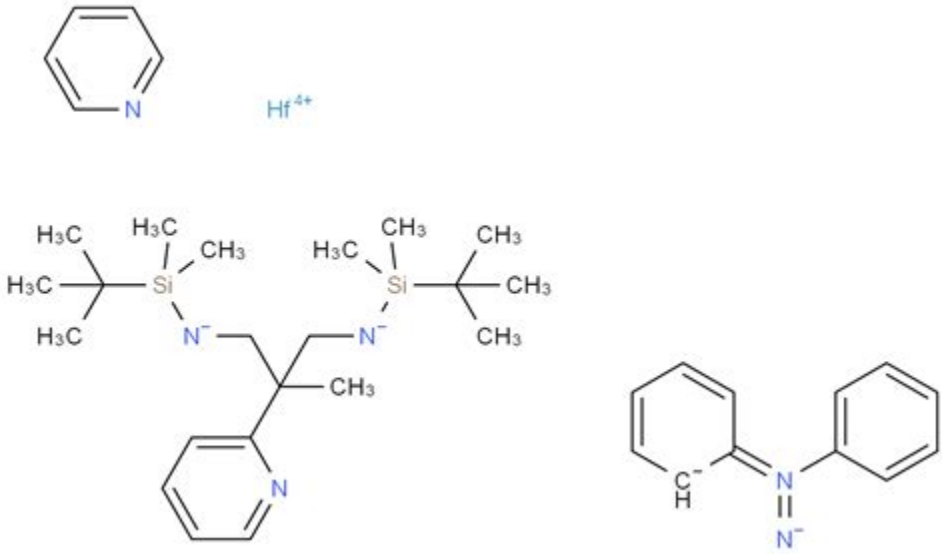
left striatum. Stereological counts of tyrosine hydroxylase-immunoreactive cells in the substantia nigra revealed that the neurotoxin caused a decrease in the number of those cells. However, when treated subsequently with 9-methyl-beta .

β-Carboline - Wikipedia



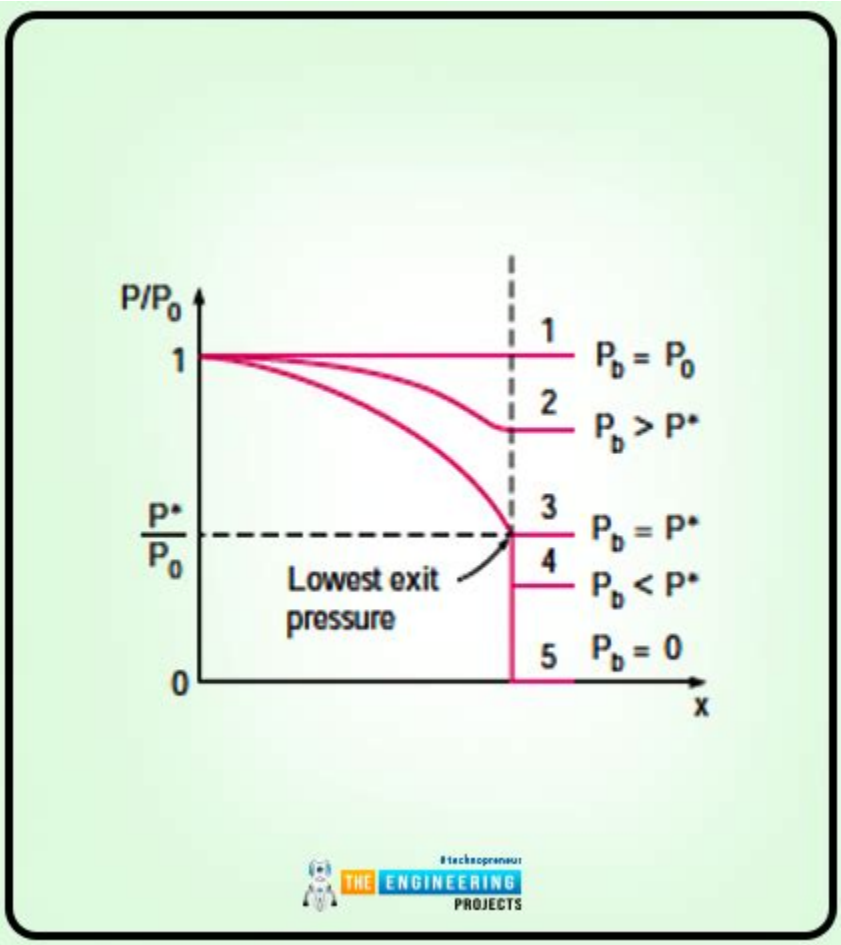
PMCID: PMC8592951 DOI: 10. 1007/s00702-020-02189-9 Abstract β-Carbolines (BC) are pyridoindoles, which can be found in various exogenous and endogenous sources. Recent studies revealed neurostimulative, neuroprotective, neuroregenerative and anti-inflammatory effects of 9-methyl-BC (9-Me-BC).

9-methyl-β-carboline | C12H10N2 | ChemSpider



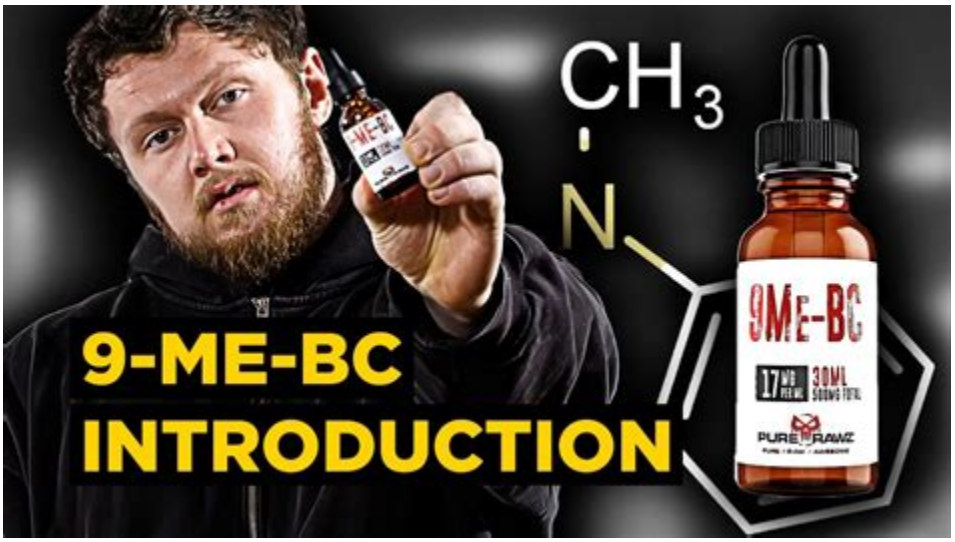
9-methyl-beta-carboline Central Nervous System Stimulants β-Carbolines (BCs) belong to the heterogenous family of carbolines, which have been found exogenously, that is, in various fruits, meats, tobacco smoke, alcohol and coffee, but also endogenously, that is, blood, brain and CSF.

Beta-Carboline - an overview | ScienceDirect Topics



A recent study in an animal model of PD described that in vivo 9-me-BC is not only able to stimulate dopaminergic cells in drug-naive animals (as shown in the present study), but also in 1-methyl-4-phenyl-pyridinium ion (MPP +)-pre-treated rats and thereby rescuing the PD-like phenotype indicating the neuroprotective properties of 9-me-BC .

9 Methyl Beta Carboline research : r/Nootropics - Reddit



9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates the expression of neurotrophic factors by astrocytes Neurology and Preclinical Neurological Studies - Original Article Open access Published: 13 April 2020 127 , 999-1012 (2020) Download PDF You have full access to this open access article

9-Me-Bc Review: Benefits, Side Effects & Where To Buy - Nootropicology

9-methyl-beta-carboline Anti-Inflammatory Agents Lipopolysaccharides Receptors, Cytokine L-Lactate Dehydrogenase Tyrosine 3-Monooxygenase Dopa Decarboxylase 5-ethynyl-2'-deoxyuridine Beta-carbolines (BCs) are potential endogenous and exogenous neurotoxins that may contribute to the pathogenesis of Parkinson's disease.

9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates .

Journal of Neural Transmission (2020) 127:999–1012
https://doi.org/10.1007/s00702-020-02189-9

NEUROLOGY AND PRECLINICAL NEUROLOGICAL STUDIES - ORIGINAL ARTICLE

9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates the expression of neurotrophic factors by astrocytes

Sebastian Keller[1] · Witold Henryk Polanski[1,2] · Christoph Enzensperger[3,4] · Heinz Reichmann[1] · Andreas Hermann[1,5,6] · Gabriele Gille[1]

Received: 18 December 2019 / Accepted: 6 April 2020 / Published online: 13 April 2020
© The Author(s) 2020, corrected publication 2021

Abstract
β-Carbolines (BC) are pyridoindoles, which can be found in various exogenous and endogenous sources. Recent studies revealed neurostimulative, neuroprotective, neuroregenerative and anti-inflammatory effects of 9-methyl-BC (9-Me-BC). Additionally, 9-me-BC increased neurite outgrowth of dopaminergic neurons independent of dopamine uptake into these neurons. In this study, the role of astrocytes in neurostimulative, neuroregenerative and neuroprotective properties of 9-me-BC was further explored.
9-Me-BC exerted anti-proliferative effects without toxic properties in dopaminergic midbrain and cortical astrocyte cultures. The organic cation transporter (OCT) but not the dopamine transporter seem to mediate at least part the effect of 9-me-BC on astrocytes. Remarkably, 9-me-BC stimulated the gene expression of several important neurotrophic factors for dopaminergic neurons like Artn, Bdnf, Egln1, Tgfb2 and Ncam1. These factors are well known to stimulate neurite outgrowth and to show neuroprotective and neuroregenerative properties to dopaminergic neurons against various toxins. Further, we show that effect of 9-me-BC is mediated through phosphatidylinositol 3-kinase (PI3K) pathway. Additionally, 9-me-BC showed inhibitory properties to monoamine oxidase (MAO) activity with an IC50 value of 1 µM for MAO-A and of 15.5 µM for MAO-B. The inhibition of MAO by 9-me-BC might contribute to the observed increased dopamine content and anti-apoptotic properties in cell culture after 9-me-BC treatment in recent studies. Thus, 9-me-BC have a plethora of beneficial effects on dopaminergic neurons warranting its exploration as a new multimodal anti-parkinsonian medication.

Keywords Dopaminergic neurons · Astrocytes · 9-Methyl-β-carboline · Inhibition of monoamine oxidase A and B · Neurotrophic factors

Abbreviations

2,9-dime-BC +	2,9-Dimethyl-β-carbolinium ion	DIV	Day in vitro
9-me-BC	9-Methyl-β-carboline	MAO	Monoamine oxidase
BC	β-Carboline	MPTP	1-Methyl-4-phenyl-1,2,3,6-tetrahydro-pyridine
BrdU	Bromdesoxyuridine	OCT	Organic cation transporter
D24	Disprocynium 24	PD	Parkinson's disease
DA	Dopamine	PI3K	Phosphatidylinositol 3-kinase
DAT	Dopamine transporter	SN	Substantia nigra
DDC	Dopa decarboxylase	TH	Tyrosine hydroxylase

Sebastian Keller and Witold Polanski contributed equally to this work.

Sebastian Keller and Witold Polanski: joint first authors.

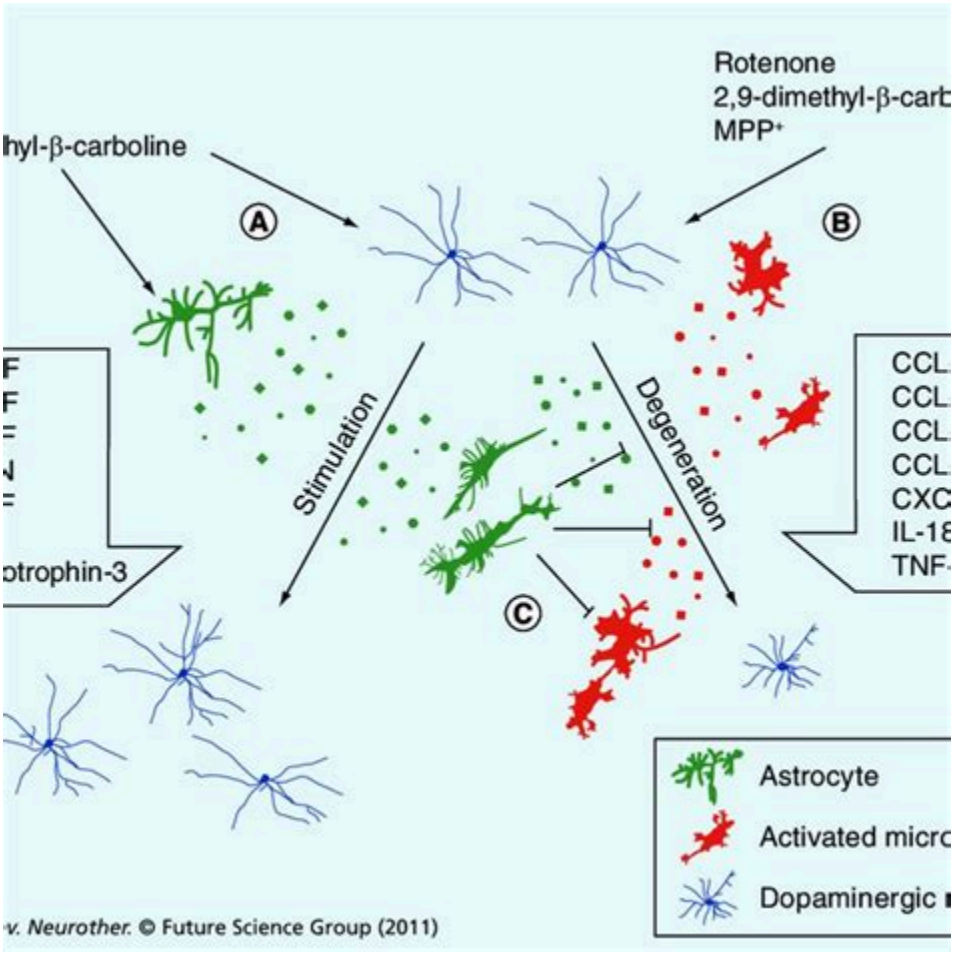
✉ Witold Henryk Polanski
witold.polanski@uniklinikum-dresden.de
Extended author information available on the last page of the article

Springer

Content courtesy of Springer Nature, terms of use apply. Rights reserved.

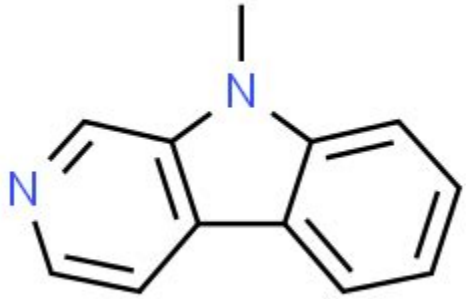
9-Methyl-β-carboline (9-Me-BC) is a heterocyclic amine of the β-carboline family, and a research chemical. [1] Chemistry 9-Me-BC is a methylated derivative of β-carboline with the molecular formula C 12 H 10 N 2 . It may be prepared by performing the Eschweiler-Clarke reaction on freebase β-carboline (norharmane) [citation needed]

Stimulation, protection and regeneration of dopaminergic neurons by 9 .



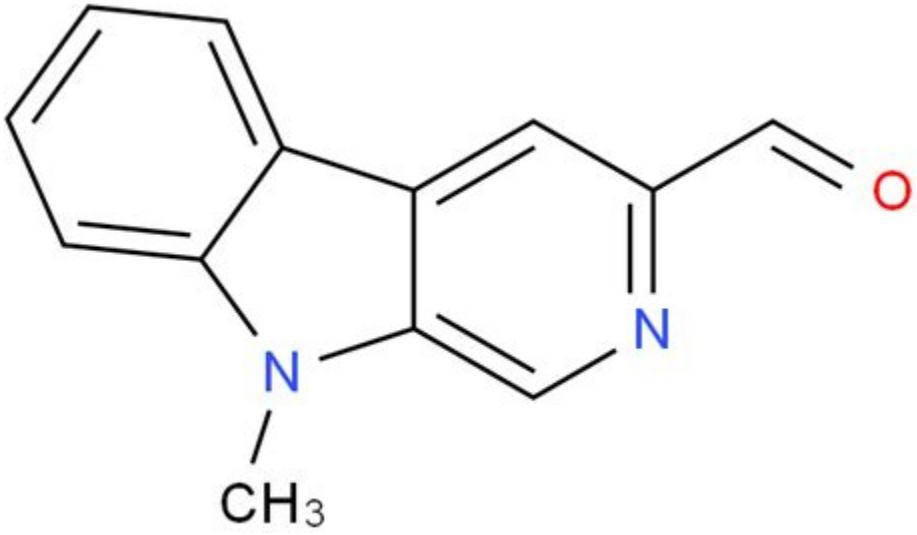
9-Me-BC, also known as 9-Methyl-β-carboline, is a member of the β-carboline family. It's an intriguing heterocyclic amine that has caught researchers' attention. Its unique chemical structure makes it a promising candidate for use in cognitive enhancement. Today, we'll examine how it works and if it's really worth using as a nootropic supplement.

9-Methyl-beta-carboline up-regulates the appearance of differentiated .



• 4 yr. ago by Volcanyx NSFW 9 Methyl Beta Carboline research So I decided to buy some 9 Methyl Beta Carboline and I have been extremely impressed so far so I figured I would write up a little bit of a log to detail the results.

9-Methyl-β-carboline - Wikipedia



Finally, 9-methyl-β-carboline acts on multiple targets in the inflammatory cascade by inhibiting the proliferation of microglia, by decreasing chemotactic cytokines and by creating an anti-inflammatory environment in the CNS. This article summarizes our current knowledge of 9-methyl-carboline and discusses its potential role as a new drug for .

9-Methyl-β-carboline inhibits monoamine oxidase activity . - Springer

Journal of Neural Transmission (2020) 127:999–1012
https://doi.org/10.1007/s00702-020-02189-9

NEUROLOGY AND PRECLINICAL NEUROLOGICAL STUDIES - ORIGINAL ARTICLE

9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates the expression of neurotrophic factors by astrocytes

Sebastian Keller[1] · Witold Henryk Polanski[1,2] · Christoph Enzensperger[3,4] · Heinz Reichmann[1] · Andreas Hermann[1,5,6] · Gabriele Gille[1]

Received: 18 December 2019 / Accepted: 6 April 2020 / Published online: 13 April 2020
© The Author(s) 2020, corrected publication 2021

Abstract
β-Carbolines (BC) are pyridoindoles, which can be found in various exogenous and endogenous sources. Recent studies revealed neurostimulative, neuroprotective, neuroregenerative and anti-inflammatory effects of 9-methyl-BC (9-Me-BC). Additionally, 9-me-BC increased neurite outgrowth of dopaminergic neurons independent of dopamine uptake into these neurons. In this study, the role of astrocytes in neurostimulative, neuroregenerative and neuroprotective properties of 9-me-BC was further explored.
9-Me-BC exerted anti-proliferative effects without toxic properties in dopaminergic midbrain and cortical astrocyte cultures. The organic cation transporter (OCT) but not the dopamine transporter seem to mediate at least part the effect of 9-me-BC on astrocytes. Remarkably, 9-me-BC stimulated the gene expression of several important neurotrophic factors for dopaminergic neurons like Artn, Bdnf, Egln1, Tgfb2 and Ncam1. These factors are well known to stimulate neurite outgrowth and to show neuroprotective and neuroregenerative properties to dopaminergic neurons against various toxins. Further, we show that effect of 9-me-BC is mediated through phosphatidylinositol 3-kinase (PI3K) pathway. Additionally, 9-me-BC showed inhibitory properties to monoamine oxidase (MAO) activity with an IC50 value of 1 µM for MAO-A and of 15.5 µM for MAO-B. The inhibition of MAO by 9-me-BC might contribute to the observed increased dopamine content and anti-apoptotic properties in cell culture after 9-me-BC treatment in recent studies. Thus, 9-me-BC have a plethora of beneficial effects on dopaminergic neurons warranting its exploration as a new multimodal anti-parkinsonian medication.

Keywords Dopaminergic neurons · Astrocytes · 9-Methyl-β-carboline · Inhibition of monoamine oxidase A and B · Neurotrophic factors

Abbreviations

2,9-dime-BC +	2,9-Dimethyl-β-carbolinium ion	DIV	Day in vitro
9-me-BC	9-Methyl-β-carboline	MAO	Monoamine oxidase
BC	β-Carboline	MPTP	1-Methyl-4-phenyl-1,2,3,6-tetrahydro-pyridine
BrdU	Bromdesoxyuridine	OCT	Organic cation transporter
D24	Disprocynium 24	PD	Parkinson's disease
DA	Dopamine	PI3K	Phosphatidylinositol 3-kinase
DAT	Dopamine transporter	SN	Substantia nigra
DDC	Dopa decarboxylase	TH	Tyrosine hydroxylase

Sebastian Keller and Witold Polanski contributed equally to this work.

Sebastian Keller and Witold Polanski: joint first authors.

✉ Witold Henryk Polanski
witold.polanski@uniklinikum-dresden.de
Extended author information available on the last page of the article

Springer

Content courtesy of Springer Nature, terms of use apply. Rights reserved.

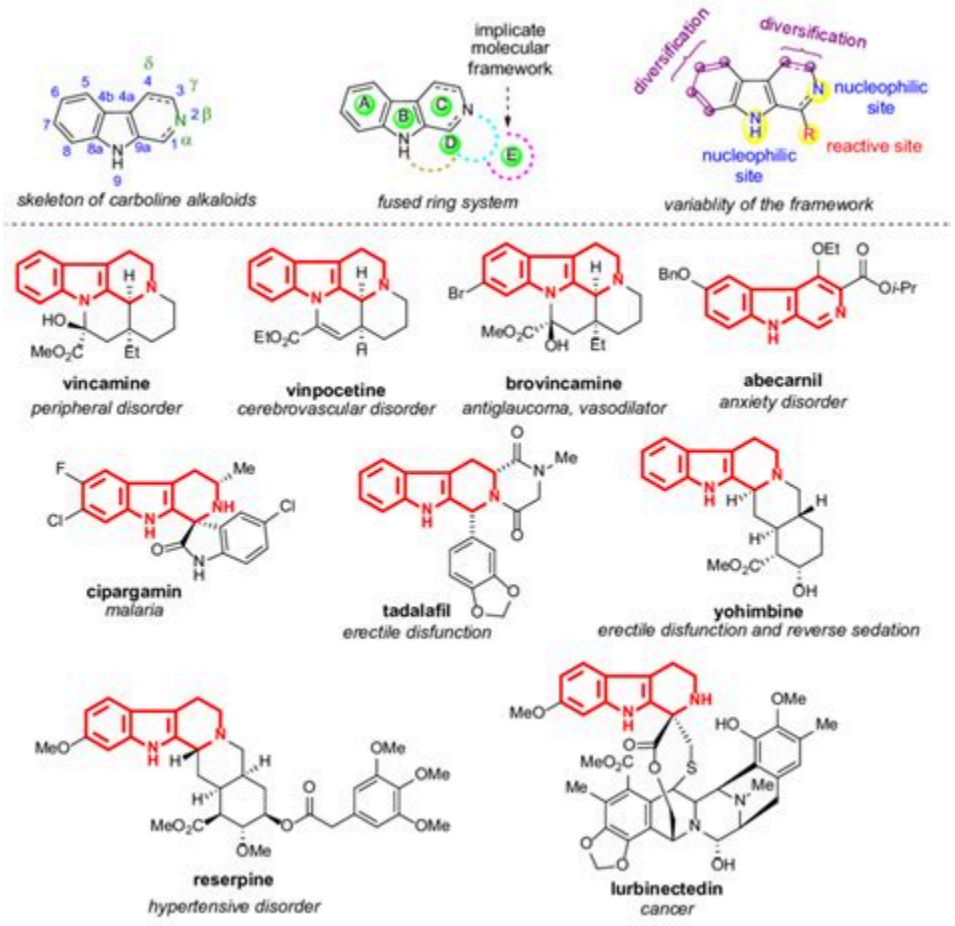
9-Me-BC (9-Methyl-9H-beta-carboline) WARNING: This product is not for human or veterinary use. We ship worldwide to all countries! Free international shipping for a limited time! Delivery in 10 days to most countries! 9-Me-BC (9-Methyl-9H-beta-carboline) For Sale | 1g $89. 95 GMP manufactured 3rd party lab tested Free Shipping Worldwide!

Hydrapharm 9-MBC Capsules | 9-Methyl Beta Carboline - Predator Nutrition

9-Methyl-β-carboline, 9-Methyl-9H-β-carboline, 9-Methylnorharman, 2521-07-5, 9-methyl-beta-carboline, 9-methyl-|A-carboline, 9-methylpyrido[3,4-b]indole, 9-Me-BC/9-methyl-9H-

pyrido[3,4-b]indoleM2818, M2818: Storage: Minimize open air exposure, store in a cool dry place: Reports:

The exceptional properties of 9-methyl-β-carboline: stimulation .



All three were 9-methyl-beta-carboline xHCl, which belongs to the -carboline compound class, yet is not a neurotoxic, but a neuroprotective member of this class (Hamann et al, 2008). Hence .

9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates .

Journal of Neural Transmission (2020) 127:999–1012
https://doi.org/10.1007/s00702-020-02189-9

NEUROLOGY AND PRECLINICAL NEUROLOGICAL STUDIES - ORIGINAL ARTICLE

9-Methyl-β-carboline inhibits monoamine oxidase activity and stimulates the expression of neurotrophic factors by astrocytes

Sebastian Keller[1] · Witold Henryk Polanski[1,2] · Christoph Enzensperger[3,4] · Heinz Reichmann[1] · Andreas Hermann[1,5,6] · Gabriele Gille[1]

Received: 18 December 2019 / Accepted: 6 April 2020 / Published online: 13 April 2020
© The Author(s) 2020, corrected publication 2021

Abstract
β-Carbolines (BC) are pyridoindoles, which can be found in various exogenous and endogenous sources. Recent studies revealed neurostimulative, neuroprotective, neuroregenerative and anti-inflammatory effects of 9-methyl-BC (9-Me-BC). Additionally, 9-me-BC increased neurite outgrowth of dopaminergic neurons independent of dopamine uptake into these neurons. In this study, the role of astrocytes in neurostimulative, neuroregenerative and neuroprotective properties of 9-me-BC was further explored.
9-Me-BC exerted anti-proliferative effects without toxic properties in dopaminergic midbrain and cortical astrocyte cultures. The organic cation transporter (OCT) but not the dopamine transporter seem to mediate at least part the effect of 9-me-BC on astrocytes. Remarkably, 9-me-BC stimulated the gene expression of several important neurotrophic factors for dopaminergic neurons like Artn, Bdnf, Egln1, Tgfb2 and Ncam1. These factors are well known to stimulate neurite outgrowth and to show neuroprotective and neuroregenerative properties to dopaminergic neurons against various toxins. Further, we show that effect of 9-me-BC is mediated through phosphatidylinositol 3-kinase (PI3K) pathway. Additionally, 9-me-BC showed inhibitory properties to monoamine oxidase (MAO) activity with an IC50 value of 1 µM for MAO-A and of 15.5 µM for MAO-B. The inhibition of MAO by 9-me-BC might contribute to the observed increased dopamine content and anti-apoptotic properties in cell culture after 9-me-BC treatment in recent studies. Thus, 9-me-BC have a plethora of beneficial effects on dopaminergic neurons warranting its exploration as a new multimodal anti-parkinsonian medication.

Keywords Dopaminergic neurons · Astrocytes · 9-Methyl-β-carboline · Inhibition of monoamine oxidase A and B · Neurotrophic factors

Abbreviations

2,9-dime-BC+	2,9-Dimethyl-β-carbolinium ion	DIV	Day in vitro
9-me-BC	9-Methyl-β-carboline	MAO	Monoamine oxidase
BC	β-Carboline	MPTP	1-Methyl-4-phenyl-1,2,3,6-tetrahydro-pyridine
BrdU	Bromdesoxyuridine	OCT	Organic cation transporter
D24	Disprocynium 24	PD	Parkinson's disease
DA	Dopamine	PI3K	Phosphatidylinositol 3-kinase
DAT	Dopamine transporter	SN	Substantia nigra
DDC	Dopa decarboxylase	TH	Tyrosine hydroxylase

Sebastian Keller and Witold Polanski contributed equally to this work.

Sebastian Keller and Witold Polanski: joint first authors.

✉ Witold Henryk Polanski
witold.polanski@uniklinikum-dresden.de
Extended author information available on the last page of the article

Springer

Content courtesy of Springer Nature, terms of use apply. Rights reserved.

9-methyl-β-carboline Molecular Formula CHN Average mass 182. 221 Da Monoisotopic mass 182. 084396 Da ChemSpider ID 144638 More details: Names Properties Searches Spectra Vendors Articles More Names and Synonyms Validated by Experts, Validated by Users, Non-Validated, Removed by Users 2521-07-5 [RN] 9H-Pyrido (3,4-b)indole, 9-methyl-

Buy 9-Methyl-9H-beta-carboline | Venogen - Certified Standards

9-MBC | Hydrapharm 9-MBC Capsules | 9-Methyl Beta Carboline | Predator Nutrition Home Mind & Health Supplements Nootropic Supplements Best seller 9-MBC 60 Capsules Nootropic Supplements

Hydrapharm Goal Study/Work Aid Type Sexual Health Supplements 22 Reviews £49. 98 £44. 98 Offer Spend £125+ and Select a FREE gift in your basket Offer Save 10% off!

- https://groups.google.com/g/musclemaestros/c/3MEvmGwP0lA
- https://collectednotes.com/petrsidorovbz/pharma-mix-4-review
- https://groups.google.com/g/ripped-reckoners/c/nUcw8UyHnpc