

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: NNC 05-2090 hydrochloride Catalog No.: 2747 Batch No.: 1

CAS Number: 184845-18-9

IUPAC Name: 1-[3-(9*H*-Carbazol-9-yl)propyl]-4-(2-methoxyphenyl)-4-piperidinol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{27}H_{30}N_2O_2.HCI$

Batch Molecular Weight: 451.01 **Physical Appearance:** Waxy solid

Solubility: DMSO to 100 mM

ethanol to 13 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows >99% purity

¹H NMR: Consistent with structure

¹³C NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 71.91 6.93 6.21 Found 71.83 6.96 6.18



Product Information

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IUPAC Name: 1-[3-(9H-Carbazol-9-yl)propyl]-4-(2-methoxyphenyl)-4-piperidinol hydrochloride

Description:

GABA uptake inhibitor that displays moderate selectivity for BGT-1 (mGAT-2) transporters (K_i values are 1.4, 15, 19 and 41 μM for hBGT-1, hGAT-3, hGAT-1 and hGAT-2 respectively). Anticonvulsive; inhibits sound-induced tonic and clonic convulsions in DBA/2 mice. Also displays affinity at α_1 - and D_2 receptors (IC₅₀ values are 266 and 1632 nM respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₇H₃₀N₂O₂.HCl

Batch Molecular Weight: 451.01 Physical Appearance: Waxy solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

DMSO to 100 mM ethanol to 13 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Thomsen et al (1997) 1-(3-(9H-carbazol-9-yl)-1-propyl)-4-(2-methoxyphenyl)-4-piperidinol, a novel subtype selective inhibitor of the mouse type II GABA-transporter. Br.J.Pharmacol. 120 983. PMID: 9134205.

Dalby et al (1997) Anticonvulsive properties of two GABA uptake inhibitors NNC 05-2045 and NNC 05-2090, not acting preferentially on GAT-1. Epilepsy Res. 28 51. PMID: 9255599.

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