

Certificate of Analysis

Print Date: Feb 6th 2020

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Product Name: SK 609 Catalog No.: 7039 Batch No.: 1

CAS Number: 1092797-77-7

IUPAC Name: 2-chloro-α-methyl-benzenepropanamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₁₄CIN.HCI

Batch Molecular Weight: 220.14

Physical Appearance: White solid

Solubility: water to 100 mM

DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

Microanalysis:

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Carbon Hydrogen Nitrogen

Theoretical 54.56 6.87 6.36 Found 54.47 6.88 6.31



Product Information

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IUPAC Name: 2-chloro-α-methyl-benzenepropanamine hydrochloride

Description:

Dopamine D_3 receptor biased agonist. Preferentially signals via the G protein-dependent pathway (EC $_{50}$ values for G protein and β -arrestin-dependent signaling are 1.1 and 50.2 μM_{\odot} , respectively). Exhibits selectivity for D_3 over D_2 receptors. Improves motor deficits in rodent Parkinson's disease models and ameliorates L-DOPA (Cat. No. 3788) induced abnormal involuntary movements.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₀H₁₄CIN.HCI

Batch Molecular Weight: 220.14 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

water to 100 mM DMSO to 100 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:

Xu et al (2017) Functional characterization of a novel series of biased signaling dopamine D₃ receptor agonists. ACS Chem.Neurosci. **8** 486. PMID: 27801563.

Simms *et al* (2016) *In vivo* characterization of a novel dopamine D₃ receptor agonist to treat motor symptoms of Parkinson's disease. Neuropharmacology *100* 106. PMID: 25896768.