



Certificate of Analysis

www.tocris.com

Product Name: GBR 12935 dihydrochloride Catalog No.: 0514 Batch No.: 3

CAS Number: 67469-81-2

IUPAC Name: 1-(2-Diphenylmethoxyethyl)-4-(3-phenylpropyl)piperazine dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₃₄N₂O.2HCl

Batch Molecular Weight: 487.51

Physical Appearance: White solid

Solubility: DMSO to 5 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.6$ (Dichloromethane:Ethanolic Ammonia soln. [95:5])

Melting Point:

Between 218 - 220°C

1H NMR:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.98 7.44 5.75 Found 68.84 7.44 5.7



Product Information

Print Date: Apr 28th 2015

Batch No.: 3

www.tocris.com

Product Name: GBR 12935 dihydrochloride

CAS Number: 67469-81-2

IUPAC Name: 1-(2-Diphenylmethoxyethyl)-4-(3-phenylpropyl)piperazine dihydrochloride

Description:

Potent and selective inhibitor of dopamine uptake ($K_D = 5.5 \text{ nM}$ in rat striatal membranes).

Physical and Chemical Properties:

Batch Molecular Formula: $C_{28}H_{34}N_2O.2HCI$

Batch Molecular Weight: 487.51 Physical Appearance: White solid

Batch Molecular Structure:

Storage: Desiccate at -20°C

Solubility & Usage Info:

DMSO to 5 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival. Solutions should be made up as soon as the vial is opened.

Catalog No.: 0514

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:

Andersen et al (1987) Biochemical and pharmacological characterization of [3H]GBR 12935 binding in vitro to rat striatal membranes: labelling of the dopamine uptake complex. J.Neurochem. 48 1887. PMID: 2952763.

Reith et al (1992) Evidence for mutually exclusive binding of cocaine, BTCP, GBR 12935, and dopamine to the dopamine transporter. Eur.J.Pharmacol. 227 417. PMID: 1446712.

Reith et al (1994) GBR 12909 and 12935 block dopamine uptake into brain synaptic vesicles as well as nerve endings. Eur.J.Pharmacol. 253 175. PMID: 8013544.

