TOCRIS bioscience

Print Date: Apr 28th 2015

Certificate of Analysis

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Product Name: **A 61603 hydrobromide** **Catalog No.: 1052** **Batch No.: 2**

CAS Number: 107756-30-9

IUPAC Name: *N*-[5-(4,5-Dihydro-1*H*-imidazol-2-yl)-2-hydroxy-5,6,7,8-tetrahydronaphthalen-1-yl]methanesulfonamide hydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{19}N_3O_3S.HBr.¼H_2O$

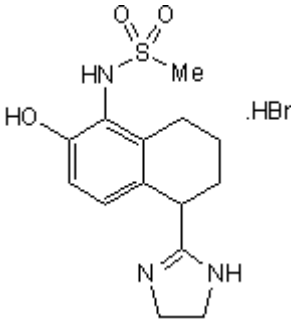
Batch Molecular Weight: 394.79

Physical Appearance: White solid

Solubility: water to 50 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.15 (Dichloromethane:Ethanolic Ammonia soln. [98:2])

Melting Point: Between 245 - 247°C

^{1}H NMR: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	42.59	5.23	10.64
Found	42.75	5.12	10.45

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Description:

Potent α-adrenoceptor agonist that is at least 35-fold more potent at α_{1A} than at α_{1B} or α_{1D} sites. Induces dose response increases in spontaneous Ca^{2+} transients in rat ventricular myocytes in vitro (EC_{50} = 6.9 nmol/L). Also available as part of the α_1-Adrenoceptor Tocriset™.

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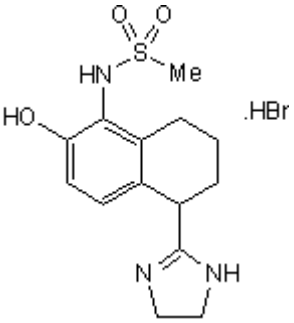

Storage: Desiccate at +4°C

Solubility & Usage Info:

water to 50 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:

Knepper *et al* (1995) A-61603, a potent α_1-adrenergic receptor agonist, selective for the α_{1A} receptor subtype. J.Pharmacol.Exp.Ther. ***274*** 97. PMID: 7616455.

Meyer *et al* (1996) Synthesis and *in vitro* characterisation of *N*-[5-(4,5-dihydro-1*H*-imidazol-2-yl)-2-hydroxy-5,6,7,8-tetrahydronaphthalen-1-yl]methanesulfonamide and its enantiomers: a novel selective α_{1A} receptor agonist. J.Med.Chem. ***39*** 4116. PMID: 8831777.

Luo *et al* (2007) Receptor subtype involved in α_{1A}-adrenergic receptor-mediated Ca^{2+} signaling in cardiomyocytes. Acta.Pharmacol.Sin. ***28*** 968. PMID: 17588332.