

Certificate of Analysis

www.tocris.com

Product Name: Carbazeran citrate

Catalog No.: 4420

Batch No.: 1

CAS Number: 153473-94-0

IUPAC Name: Ethyl 1-(6,7-dimethoxy-1-phthalaziny)-4-piperidiny carbamate citrate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{24}N_4O_4 \cdot C_6H_8O_7 \cdot H_2O$

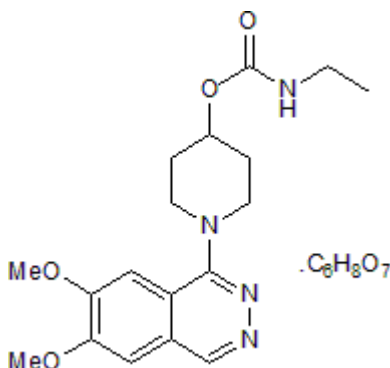
Batch Molecular Weight: 570.55

Physical Appearance: White solid

Solubility:
water to 50 mM
DMSO to 100 mM
ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	50.52	6.01	9.82
Found	50.53	5.94	9.89

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Information

www.tocris.com

Product Name: Carbazeran citrate

Catalog No.: 4420

Batch No.: 1

CAS Number: 153473-94-0

IUPAC Name: Ethyl 1-(6,7-dimethoxy-1-phthalazinyl)-4-piperidiny carbamate citrate

Description:

Aldehyde oxidase (AO) substrate. Exhibits activities as a phosphodiesterase inhibitor; produces concentration-dependent positive inotropic responses in isolated right atria.

Physical and Chemical Properties:

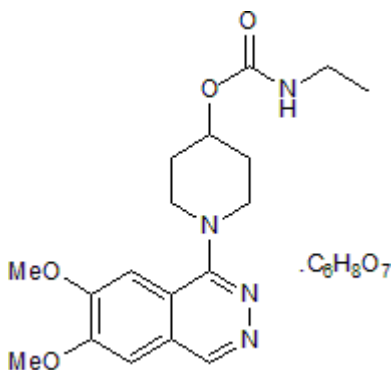
Batch Molecular Formula: C₁₈H₂₄N₄O₄·C₆H₈O₇·H₂O

Batch Molecular Weight: 570.55

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water to 50 mM
DMSO to 100 mM
ethanol to 10 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:

Shahid and Rodger *et al* (1989) Chronotropic and inotropic actions of amrinone, carbazeran and isobutylmethyl xanthine: role of phosphodiesterase inhibition. *Br.J.Pharmacol.* **98** 291. PMID: 2478244.

Hutzler *et al* (2011) Characterization of aldehyde oxidase enzyme activity in cryopreserved human hepatocytes. *Drug Metab.Dispos.* **40** 267. PMID: 22031625.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel: +1 612 379 2956