

Certificate of Analysis

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Product Name: BYK 191023 dihydrochloride

Catalog No.: 2866

Batch No.: 3

CAS Number: 1216722-25-6

IUPAC Name: 2-[2-(4-Methoxy-2-pyridinyl)ethyl]-1*H*-imidazo[4,5-*b*]pyridine dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₄N₄O.2HCl

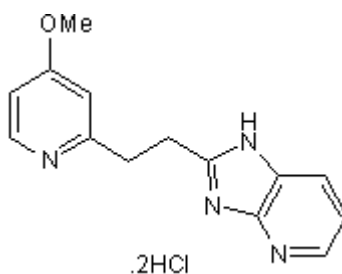
Batch Molecular Weight: 327.21

Physical Appearance: Off-white solid

Solubility: water to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:	Carbon Hydrogen Nitrogen			
Theoretical	51.39	4.93	17.12	
Found	51.3	4.86	16.82	

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

Product Information

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IUPAC Name: 2-[2-(4-Methoxy-2-pyridinyl)ethyl]-1*H*-imidazo[4,5-*b*]pyridine dihydrochloride

Description:

Potent and selective inhibitor of inducible nitric oxide synthase (iNOS) (IC₅₀ values are 86, 17000, 162000 nM for iNOS, nNOS and eNOS respectively). Acts in an NADPH- and time-dependent manner. Active in vivo, reverses pathological hypotension in the rodent endotoxin model.

Physical and Chemical Properties:

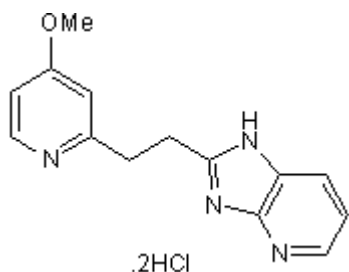
Batch Molecular Formula: C₁₄H₁₄N₄O.2HCl

Batch Molecular Weight: 327.21

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water 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:

Lehner *et al* (2006) In vivo characterisation of the novel imidazopyridine BYK191023 2-[2-(4-methoxy-pyridin-2-yl)-ethyl]-3*H*-imidazo[4,5-*b*]pyridine, a potent and highly selective inhibitor of inducible nitric-oxide synthase. *J.Pharmacol.Exp.Ther.* **317** 181. PMID: 16368897.

Strub *et al* (2006) The novel imidazopyridine 2-[2-(4-methoxy-pyridin-2-yl)-ethyl]-3*H*-imidazo[4,5-*b*]pyridine (BYK191023) is a highly selective inhibitor of the inducible nitric-oxide synthase. *Mol.Pharmacol.* **68** 328.

Tiso *et al* (2008) BYK191023 (2-[2-(4-methoxy-pyridin-2-yl)-ethyl]-3*H*-imidazo[4,5-*b*]pyridine) is an NADPH- and time-dependent irreversible inhibitor of inducible nitric-oxide synthase. *Mol.Pharmacol.* **72** 1244.

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