



Certificate of Analysis

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Product Name: ML 120B dihydrochloride Catalog No.: 4899 Batch No.: 1

IUPAC Name: N-(6-Chloro-7-methoxy-9*H*-pyrido[3,4-b]indol-8-yl)-2-methyl-3-pyridinecarboxamide dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{15}CIN_4O_2.2HCI.34H_2O$

Batch Molecular Weight:453.23Physical Appearance:Yellow solidSolubility:DMSO to 20 mM

water to 5 mM with gentle warming

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

Microanalysis:

TLC: $R_f = 0.1$ (Chloroform:Methanol [9:1])

HPLC: Shows >99% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Carbon Hydrogen Nitrogen
Theoretical 50.35 4.11 12.36
Found 50.28 4.26 12.23



Product Information

Print Date: Mar 6th 2014

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Description:

Novel, ATP-competitive IKK2-selective inhibitor (IC $_{50}$ = 60 nM at 50 μ M ATP) exhibits no inhibition at IKK1 (EC $_{50}$ >100 μ M), IKK ϵ (EC $_{50}$ >100 μ M) or a panel of 28 other kinases (EC $_{50}$ >50 μ M). Exhibits antitumor activity in lymphomabearing SCID mice. Demonstrates synergistic cytotoxic effects with vincristine (Cat No. 1257).

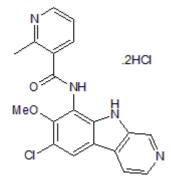
Physical and Chemical Properties:

Batch Molecular Formula: C₁₉H₁₅CIN₄O₂.2HCI.³/₄H₂O

Batch Molecular Weight: 453.23 Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 20 mM

water to 5 mM with gentle warming

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:

Catley *et al* (2006) Validation of the anti-inflammatory properties of small-molecule IkappaB Kinase (IKK)-2 inhibitors by comparison with adenoviral-mediated delivery of dominant-negative IKK1 and IKK2 in human airways smooth muscle. Mol.Pharmacol. **70** (2) 697. PMID: 16687566.

Nagashima et al (2006) Rapid TNFR1-dependent lymphocyte depletion in vivo with a selective chemical inhibitor of IKKbeta. Blood 107 (11) 4266. PMID: 16439676.

Al-Katib *et al* (2010) I-kappa-kinase-2 (IKK-2) inhibition potentiates vincristine cytotoxicity in non-Hodgkin's lymphoma. Mol.Cancer **9** (228) 1476. PMID: 20809973.

ReD