



Certificate of Analysis

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Product Name: K 252a Catalog No.: 1683 Batch No.: 7

CAS Number: 99533-80-9

IUPAC Name: (9S,10R,12R)-2,3,9,10,11,12-Hexahydro-10-hydroxy-9-methyl-1-oxo-9,12-epoxy-1*H*-diindolo[1,2,3-*fg*:3',2',1'-*kI*]

pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid methyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{27}H_{21}N_3O_5$ Batch Molecular Weight: 467.48

Physical Appearance: Off White solid
Solubility: DMSO to 25 mM
Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.1% purity

Mass Spectrum: Consistent with structure



Product Information

Print Date: Aug 4th 2022

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CAS Number: 99533-80-9

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pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid methyl ester

Description:

K 252a is a non-selective protein kinase inhibitor; analog of staurosporine (Cat.No. 1285). Inhibits PKC (IC $_{50}$ = 32.9 nM), Ca $^{2+}$ /calmodulin-stimulated phosphodiesterases (IC $_{50}$ = 1.3 - 2.9 μ M), MLCK (K $_{i}$ = 20 nM) and receptor tyrosine kinases. Inhibits the oncogenic properties of MET; prevents autophosphorylation and activation of downstream effectors (MAPK, Akt).

Physical and Chemical Properties:

Batch Molecular Formula: $C_{27}H_{21}N_3O_5$ Batch Molecular Weight: 467.48 Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 25 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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:

Morotti *et al* (2002) K252a inhibits the oncogenic properties of Met, the HGF receptor. Oncogene **21** 4885. PMID: 12118367. Knusel and Hefti (1992) K-252 compounds: modulators of neurotrophin signal transduction. J.Neurochem. **59** 1987. PMID: 1431889. Ruegg and Burgess (1989) Staurosporine, K-252 and UCN-01: potent but nonspecific inhibitors of protein kinases. TiPS **10** 218. PMID: 2672462.

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