

Product Name: K 579

Catalog No.: 2790

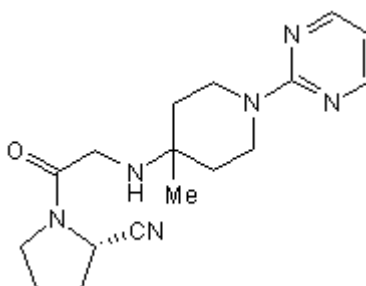
Batch No.: 2

CAS Number: 440100-64-1

IUPAC Name: (2S)-1-[[[4-Methyl-1-(2-pyrimidinyl)-4-piperidinyl]amino]acetyl]-2-pyrrolidinecarbonitrile

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₄N₆O
Batch Molecular Weight: 328.41
Physical Appearance: Yellow solid
Solubility: 1eq. HCl to 50 mM
DMSO to 100 mM
ethanol to 20 mM
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.55 (Chloroform:Methanol [9:1])
HPLC: Shows >99.5% purity
Chiral HPLC: Shows >99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	62.17	7.37	25.59
Found	61.85	7.46	25.6

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

Product Name: K 579

Catalog No.: 2790

Batch No.: 2

CAS Number: 440100-64-1

IUPAC Name: (2S)-1-[[[4-Methyl-1-(2-pyrimidinyl)-4-piperidinyl]amino]acetyl]-2-pyrrolidinecarbonitrile

Description:

Dipeptidyl peptidase IV inhibitor. Inhibits rat, canine, human and monkey enzymes with IC₅₀ values of 3, 5, 8, and 8 nM respectively. Long-acting hypoglycemic agent; attenuates glucose excursion following glucose loading in Zucker fatty rats.

Physical and Chemical Properties:

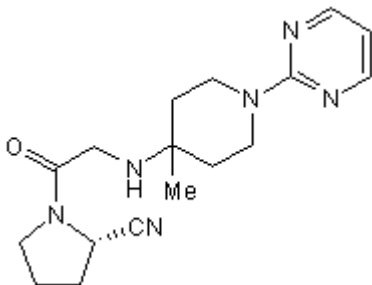
Batch Molecular Formula: C₁₇H₂₄N₆O

Batch Molecular Weight: 328.41

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Takasaki et al (2004) K579, a slow-binding inhibitor of dipeptidyl peptidase IV, is a long-acting hypoglycemic agent. *Eur.J.Pharmacol.* **486** 335. PMID: 14985056.

Takasaki et al (2004) Effects of combination treatment with dipeptidyl peptidase IV inhibitor and sulfonyleurea on glucose levels in rats. *J.Pharmacol.Sci.* **95** 291. PMID: 15215655.

Takasaki et al (2004) Involvement of the active metabolites in the inhibitory activity of K579 on rat plasma dipeptidyl peptidase IV. *Eur.J.Pharmacol.* **505** 237. PMID: 15556158.

Storage: Desiccate at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

1eq. HCl to 50 mM

DMSO to 100 mM

ethanol to 20 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.

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