

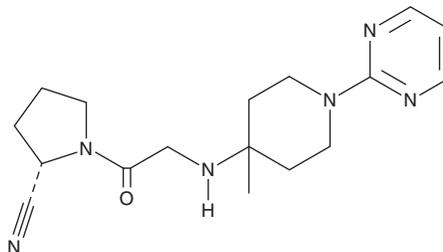
PRODUCT INFORMATION



K579

Item No. 42505

CAS Registry No.: 440100-64-1
Formal Name: 1-[2S-[4-methyl-1-(2-pyrimidinyl)-4-piperidinyl]amino]acetyl]-2-pyrrolidinecarbonitrile
MF: C₁₇H₂₄N₆O
FW: 328.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

K579 is supplied as a solid. A stock solution may be made by dissolving the K579 in the solvent of choice, which should be purged with an inert gas. K579 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

K579 is an inhibitor of dipeptidyl peptidase 4 (DPP-4; IC₅₀ = 5 nM for the human enzyme).¹ *In vivo*, K579 (1 mg/kg) reduces plasma DPP-4 activity and glucose levels and increases plasma insulin levels in an oral glucose tolerance test (OGTT) in wild-type and *fa/fa* Zucker fatty rats. It also reduces total ulcer length in a rat model of intestinal ulcers induced by indomethacin (Item No. 70270).²

References

1. Takasaki, K., Iwase, M., Nakajima, T., *et al.* K579, a slow-binding inhibitor of dipeptidyl peptidase IV, is a long-acting hypoglycemic agent. *Eur. J. Pharmacol.* **486(3)**, 335-342 (2004).
2. Inoue, T., Higashiyama, M., Kaji, I., *et al.* Dipeptidyl peptidase IV inhibition prevents the formation and promotes the healing of indomethacin-induced intestinal ulcers in rats. *Dig. Dis. Sci.* **59(6)**, 1286-1295 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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