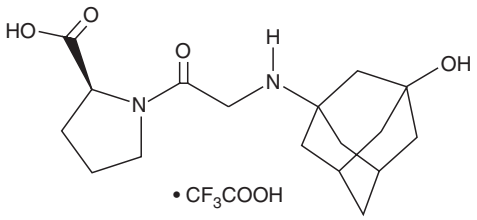
PRODUCT INFORMATION

Vildagliptin carboxylic acid metabolite (trifluoroacetate salt)

Item No. 22088

CAS Registry No.: 565453-41-0
Formal Name: N-(3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl)glycyl-L-proline, mono(trifluoroacetate)
MF: $C_{17}H_{26}N_2O_4 \bullet CF_3COOH$
FW: 436.4
Purity: ≥95%
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

Vildagliptin carboxylic acid metabolite (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the vildagliptin carboxylic acid metabolite (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Vildagliptin carboxylic acid metabolite (trifluoroacetate salt) is slightly soluble in methanol and DMSO.

Vildagliptin carboxylic acid metabolite (trifluoroacetate salt) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Vildagliptin carboxylic acid metabolite is the major metabolite of the dipeptidyl peptidase 4 (DPP-4) inhibitor vildagliptin (Item No. 14705) in humans.[1] Vildagliptin carboxylic acid metabolite has an IC_{50} value of 477 µM for DPP-4 in human Caco-2 cells.[2] It is formed from hydrolysis of the cyano group on vildagliptin.

References

1. He, H., Tran, P., Yin, H., *et al.* Absorption, metabolism, and excretion of [^{14}C]vildagliptin, a novel dipeptidyl peptidase 4 inhibitor, in humans. *Drug. Metab. Dispos.* **373(3)**, 536-544 (2009).
2. Villhauer, E.B., Brinkman, J.A., Naderi, G.B., *et al.* 1-[[(3-hydroxy-1-adamantyl)amino]acetyl]-2-cyano-(S)-pyrrolidine: A potent, selective, and orally bioavailable dipeptidyl peptidase IV inhibitor with antihyperglycemic properties. *J. Med. Chem.* **49(13)**, 2774-2789 (2003).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM