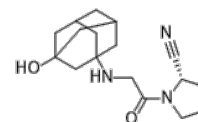


Product Name : Vildagliptin
Cat. No. : PC-22850
CAS No. : 274901-16-5
Molecular Formula : C₁₇H₂₅N₃O₂
Molecular Weight : 303.41
Target : Dipeptidyl Peptidase (DPP)
Solubility : 10 mM in DMSO



Biological Activity

Vildagliptin (NVP-LAF237, LAF237) is a potent, selective and orally bio-available DPP-4 (DPP-IV) inhibitor with IC₅₀ of 3.5 nM in primary DPP-IV assay in human Caco-2 cells.

Vildagliptin (NVP-LAF237, LAF237) is a slow-binding DPP IV inhibitor with an association rate constant of 1.4x10⁽⁵⁾M⁽⁻¹⁾s⁽⁻¹⁾ and a K_(i) of 17nM.

Vildagliptin (NVP-LAF237, LAF237) is a micromolar inhibitor for dipeptidyl-peptidase 8 and does not significantly inhibit dipeptidyl-peptidase II (EC 3.4.11.2), prolyl oligopeptidase (EC 3.4.21.26), aminopeptidase P (EC 3.4.11.9) or aminopeptidase M (EC 3.4.11.2).

Vildagliptin (NVP-LAF237, LAF237) improves insulin secretion and glucose homeostasis with a profile wholly consistent with increased action of glucagon-like peptide-1.

References

Villhauer EB, et al. J Med Chem. 2003 Jun 19;46(13):2774-89.

Mari A, et al. J Clin Endocrinol Metab. 2005 Aug;90(8):4888-94.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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