



Alogliptin

Cat. No.:	OB0225WX-2622
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and HPLC.
Size:	5 mg; 25 mg; 100 mg; 1 g

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Alogliptin is a high-affinity serine protease inhibitor that targets dipeptidyl peptidase IV (DPP-4) with an IC ₅₀ of 2.63 nM, displaying more than 10,000-fold selectivity over the related enzymes DPP-8 and DPP-9.
Synonym	SYR 322; 850649-61-5; Alogliptina; (R)-2-((6-(3-aminopiperidin-1-yl)-3-methyl-2,4-dioxo-3,4-dihydropyrimidin-1(2H)-yl)methyl)benzonitrile; Alogliptine; Alogliptinum; 2-({6-[(3R)-3-Aminopiperidin-1-Yl]-3-Methyl-2,4-Dioxo-3,4-Dihydropyrimidin-1(2h)-Yl}methyl)benzonitrile; 2-[[6-[(3R)-3-aminopiperidin-1-yl]-3-methyl-2,4-dioxopyrimidin-1-yl]methyl]benzonitrile; 2-({6-[(3R)-3-amino piperidin-1-yl]-3-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrimidin-1-yl}methyl)benzo nitrile; 2-((6-((3R)-3-aminopiperidin-1-yl)-3-methyl-2,4-dioxo-3,4-dihydr opyrimidin-1(2H)-yl)methyl) benzonitrile; vipidia; Benzonitrile,2-[[6-[(3R)-3-amino-1-piperidiny]l]-3,4-dihydro-3-methyl-2,4-dioxo-1(2H)-pyrimidinyl]methy l]-; Alogliptin tartrate; 2-((6-((3R)-3-aminopiperidin-1-yl)-3-methyl-2,4 -dioxo-3,4-dihydropyrimidin-1(2H)-yl)methyl)benzonitrile; 2-[[6-[(3R)-3-A mino-1-piperidiny]l]-3,4-dihydro-3-methyl-2,4-dioxo-1(2H)-pyrimidinyl]methy]benz onitrile; (R)-2-[6-[3-Aminopiperidin-1-yl]-3-methyl-2,4-dioxo-1,2,3,4-tet rahydropyrimidin-1-ylmethyl]benzonitrile; 2-[[6-[(3R)-3-Amino-1-piperidin yl]-3,4-dihydro-3-methyl-2,4-dioxo-1(2H)-pyrimidinyl]methyl]benzonitrile; Alogli ptin; MFCD09833196
CAS No.	850649-61-5
Compound CID	11450633



Formula	C ₁₈ H ₂₁ N ₅ O ₂
Formula Weight	339.39

Specification

IUPAC Name	2-[[6-[(3R)-3-Aminopiperidin-1-yl]-3-methyl-2,4-dioxypyrimidin-1-yl]methy l]benzonitrile
InChI	InChI=1S/C18H21N5O2/c1-21-17(24)9-16(22-8-4-7-15(20)12-22)23(18(21)25)11-14-6-3-2-5-13(14)10-19/h2-3,5-6,9,15H,4,7-8,11-12,20H2,1H3/t15-/m1/s1
InChI Key	ZSBOMTDTBDDKMP-OAHLLOKOSA-N
SMILES string	CN1C(=O)C=C(N(C1=O)CC2=CC=CC=C2C#N)N3CCC[C@H](C3)N
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	Alogliptin is applied in metabolic pharmacology as a selective DPP-4 inhibitor to study the enhancement of incretin hormone activity and the improvement of glucose-dependent insulin secretion.

Library Information

Target	DPP
Receptor	DPP4
Pathways	Proteases
Plate Number	L6700-07
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	67 mg/mL; 197.41 mM
Water Max Solubility	18 mg/mL; 53.04 mM
ALogP	1.271
HBA_Count	2
HBD_Count	1
Rotatable Bond	3