



Glasdegib (PF-04449913)

Cat. No.:	OB0225WX-2670
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and HPLC.
Size:	5 mg; 25 mg; 50 mg; 100 mg

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

Product Overview

Description	Glasdegib is an orally bioavailable small molecule that acts as a potent inhibitor of the Smoothed (Smo) receptor with an IC ₅₀ of 5 nM.
Synonym	Glasdegib; 1095173-27-5; PF-04449913; PF 04449913; 1-((2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzo[d]imidazol-2-yl)-1-methylpiperidin-4-yl)-3-(4-cyanophenyl)urea; glasdegibum; 1-[(2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzimidazol-2-yl)-1-methylpiperidin-4-yl]-3-(4-cyanophenyl)urea; Glasdegib (PF-04449913); PF-4449913; PF-913; 1-((2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzimidazol-2-yl)-1-methylpiperidin-4-yl)-3-(4-cyanophenyl)urea; <i>N</i> -[(2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzimidazol-2-yl)-1-methylpiperidin-4-yl]- <i>N'</i> -(4-cyanophenyl)urea; Urea, <i>N</i> -[(2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzimidazol-2-yl)-1-methyl-4-piperidinyl]- <i>N'</i> -(4-cyanophenyl)-; <i>N</i> -[(2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -benzimidazol-2-yl)-1-methyl-4-piperidinyl]- <i>N'</i> -(4-cyanophenyl)-urea; PF 04449913; MFCD25976839
CAS No.	1095173-27-5
Compound CID	25166913
Formula	C ₂₁ H ₂₂ N ₆
Formula Weight	374.44

Specification

IUPAC Name	1-[(2 <i>R</i> ,4 <i>R</i>)-2-(1 <i>H</i> -Benzimidazol-2-yl)-1-methylpiperidin-4-yl]-3-(4-cyanophenyl)urea
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InChI	InChI=1S/C21H22N6O/c1-27-11-10-16(24-21(28)23-15-8-6-14(13-22)7-9-15)12-19(27)20-25-17-4-2-3-5-18(17)26-20/h2-9,16,19H,10-12H2,1H3,(H,25,26)(H2,23,24,28)/t16-,19-/m1/s1
InChI Key	SFNSLLSYNZWZQG-VQIMIECSA-N
SMILES string	CN1CC[C@H](C[C@@H]1C2=NC3=CC=CC=C3N2)NC(=O)NC4=CC=C(C=C4)C#N
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	Glasdegib is used in stem cell and oncology research as an orally active Smoothened (Smo) inhibitor to investigate the regulation of the Hedgehog signaling pathway in myeloid malignancies.

Library Information

Target	Hedgehog/Smoothened
Receptor	Smo
Pathways	Stem cells & Wnt
Plate Number	L6700-08
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	47 mg/mL; 125.52 mM
ALogP	2.363
HBA_Count	2
HBD_Count	3
Rotatable Bond	3