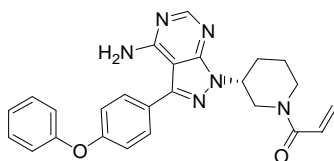




Certificate of Analysis

Axon Catalogue ID: 1858 **Batch Number:** 1
Product Name: PCI 32765
Alternative Name(s): Ibrutinib
IUPAC Name: (R)-1-(3-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)piperidin-1-yl)prop-2-en-1-one

Structure:



Amount:

CAS number: 936563-96-1
Batch Molecular Formula: C₂₅H₂₄N₆O₂·1/3H₂O **Batch MW:** 446.50
Appearance: White solid **Observed m.p.:** 155.0-155.3°C
TLC (R_f): 0.45 9:1 DCM/Methanol
Chemical Purity: 99.7% **Wavelength for purity check:** 258 nm
Optical Purity (ee):
¹H-NMR (300 MHz): Analytical data confirm chemical structure
Mass Spec: Analytical data confirm chemical structure
Microanalysis: Not available

Storage Conditions: Desiccate at <4°C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water			Insoluble
	1eq. NaOH			Not Tested
	1eq. HCl			Not Tested
	DMSO	35.6	79.73	Soluble
	EtOH			Not Tested

Remarks:

Quality controller: M. Brandsma, MSc.

Date: 5-7-2012

The purity of Axon products is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to info@axonmedchem.com indicating Axon Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only