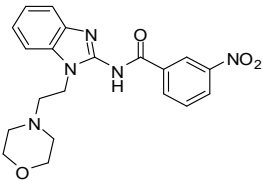




Certificate of Analysis

Axon Catalogue ID:	4235	Batch Number:	1																								
Product Name:	IRAK1/4 inhibitor 1																										
Alternative Name(s):	N.A.																										
IUPAC Name:	N-(1-(2-Morpholinoethyl)-1H-benzo[d]imidazol-2-yl)-3-nitrobenzamide																										
Structure:		Amount:																									
CAS number(s):	509093-47-4																										
Molecular Formula:	C ₂₀ H ₂₁ N ₅ O ₄	Molecular Weight:	395.41																								
Batch Molecular Formula:	C ₂₀ H ₂₁ N ₅ O ₄ .0.25H ₂ O	Batch Molecular Weight:	399.92																								
Appearance:	Yellow solid	Observed mp:	225.2 - 227.5 °C																								
TLC (R_f):	0.8	DCM/MeOH (9:1)																									
Chemical Purity:	98.8%																										
¹H-NMR:	Analytical data confirm chemical structure																										
Mass Spec:	Analytical data confirm chemical structure																										
Microanalysis:	Calculated: C 60.07, H 5.42, N 17.51; Found: C 59.72, H 5.20, N 17.50																										
Storage Conditions:	Store at -20 °C																										
Solubility Data:	<table><thead><tr><th>Solvent</th><th>Solubility (mg/ml)</th><th>Solubility (mM)</th><th>Remarks</th></tr></thead><tbody><tr><td>Water</td><td>0.0</td><td>0.0</td><td>Insoluble</td></tr><tr><td>0.1N NaOH (aq)</td><td></td><td></td><td>Not Tested</td></tr><tr><td>0.1N HCl (aq)</td><td>0.0</td><td>0.0</td><td>Insoluble</td></tr><tr><td>DMSO</td><td>2.7</td><td>6.8</td><td></td></tr><tr><td>EtOH</td><td>0.0</td><td>0.0</td><td>Insoluble</td></tr></tbody></table>	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks	Water	0.0	0.0	Insoluble	0.1N NaOH (aq)			Not Tested	0.1N HCl (aq)	0.0	0.0	Insoluble	DMSO	2.7	6.8		EtOH	0.0	0.0	Insoluble		
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EtOH	0.0	0.0	Insoluble																								
Remarks:	Contains 0.36 wt% of DMF, determined by NMR.																										
QC Date:	02/09/2024																										

The purity of Axon Ligands 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 Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only