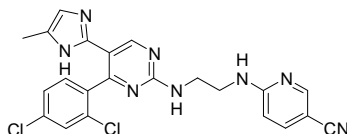




## Certificate of Analysis

**Axon Catalogue ID:** 1386 **Batch Number:** 6  
**Product Name:** CHIR 99021  
**Alternative Name(s):** CT 99021  
**IUPAC Name:** 6-{2-[4-(2,4-Dichloro-phenyl)-5-(5-methyl-1H-imidazol-2-yl)-pyrimidin-2-ylamino]-ethylamino}-nicotinonitrile

**Structure:**



**Amount:**

**CAS number:** 252917-06-9  
**Batch Molecular Formula:** C<sub>22</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>8</sub> **Batch MW:** 465.35  
**Appearance:** Off-white Solid **Observed m.p.:** >250 (Dec.)°C  
**TLC (R<sub>f</sub>):** 0.6 9 EtOAc/THF  
**Chemical Purity:** 99.1% **Wavelength for purity check:** 277 nm  
**Optical Purity (ee):**  
**1H-NMR (300 MHz):** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** C, H, and N fit within 0,4% of theoretical calculation  
**Storage Conditions:** Desiccate at -20°C  
**Solubility Data:**

Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
Water			Insoluble
1eq. NaOH			Insoluble
1eq. HCl			Not tested.
DMSO	17.10	36.75	* Upon warming to 100 mM
EtOH			Not tested.

**Remarks:** \* Soluble in DMSO at room temperature to 36 mM; upon warming/vortexing to 100 mM

**Quality controller:** M. Brandsma, MSc. **Date:** 5/2/2011

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](mailto:info@axonmedchem.com) indicating Axon Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**