# Data Sheet (Cat.No.T6145)



## ZM39923 hydrochloride

### **Chemical Properties**

CAS No.: 1021868-92-7

Formula: C23H25NO·HCl

Molecular Weight: 367.91

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

## **Biological Description**

| Description   | ZM39923 hydrochloride (JAK3 Inhibitor IV) is an JAK1/3 inhibitor with pIC50 of 4.4/7.1, almost no activity to JAK2 and modestly potent to EGFR; also found to be sensitive to transglutaminase.  |
|---------------|--|
| Targets(IC50) | EGFR,Others,JAK  |
| In vitro      | The selectivity of Rotigotine for D3 (pKi 9.2) receptors is higher 10-fold than D2/D4/D5 (pKi 8.5-8.0) and 100-fold than D1 receptors (pKi 7.2). Rotigotine (10 µM) decreases the number of THir neurons by 40% in primary mesencephalic cell culture. In functional studies, Rotigotine behaves as a full agonist at all dopamine receptors but notably, the potency for stimulation of D1 receptors is similar to that for D2/D3 receptors (pEC50 respectively: 9.0, 9.4-8.6, 9.7). Rotigotine (0.01 µM) slightly protects dopaminergic neurons against MPP+ toxicity, significantly protects dopaminergic neurons against rotenone-induced cell death, and significantly inhibits ROS production by rotenone. |

## **Solubility Information**

| Solubility | Ethanol: 8 mg/mL (21.74 mM),<br>br/>DMSO: 28 mg/mL (76.1 mM),<br>H2O: < 1 mg/mL          |
|------------|--|
|            | (insoluble or slightly soluble),<br>(< 1 mg/ml refers to the product slightly soluble or |
|            | insoluble)   |

#### **Preparing Stock Solutions**

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 2.7181 mL | 13.5903 mL | 27.1806 mL |
| 5 mM  | 0.5436 mL | 2.7181 mL  | 5.4361 mL  |
| 10 mM | 0.2718 mL | 1.359 mL   | 2.7181 mL  |
| 50 mM | 0.0544 mL | 0.2718 mL  | 0.5436 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

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### Reference

Brown GR, et al. Bioorg Med Chem Lett. 2000, 10(6), 575-579. Lai TS, et al. Chem Biol, 2008, 15(9), 969-978.



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