# UNC2250

| Cat. No.:          | HY-15797                    |       |         |  |
|--------------------|-----------------------------|-------|---------|--|
| CAS No.:           | 1493694-70-4                |       |         |  |
| Molecular Formula: | $C_{24}H_{36}N_6O_2$        |       |         |  |
| Molecular Weight:  | 440.58                      |       |         |  |
| Target:            | TAM Receptor                |       |         |  |
| Pathway:           | Protein Tyrosine Kinase/RTK |       |         |  |
| Storage:           | Powder                      | -20°C | 3 years |  |
|                    |                             | 4°C   | 2 years |  |
|                    | In solvent                  | -80°C | 2 years |  |
|                    |                             | -20°C | 1 year  |  |

#### SOLVENT & SOLUBILITY

| In Vitro                   | 0.1 M HCL : 12.5 mg/mL (28.37 mM; ultrasonic and adjust pH to 3 with HCl)<br>DMSO : ≥ 10 mg/mL (22.70 mM)<br>* "≥" means soluble, but saturation unknown.  |                               |           |            |            |  |  |
|----------------------------|--|-------------------------------|-----------|------------|------------|--|--|
| Preparing<br>Stock Solutio | Preparing<br>Stock Solutions   | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |  |  |
|                            |  | 1 mM                          | 2.2697 mL | 11.3487 mL | 22.6974 mL |  |  |
|                            |  | 5 mM                          | 0.4539 mL | 2.2697 mL  | 4.5395 mL  |  |  |
|                            |  | 10 mM                         | 0.2270 mL | 1.1349 mL  | 2.2697 mL  |  |  |
|                            | Please refer to the solubility information to select the appropriate solvent.  |                               |           |            |            |  |  |
| In Vivo                    | <ol> <li>Add each solvent one by one: 0.5% CMC-Na/saline water<br/>Solubility: 10 mg/mL (22.70 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 50% PEG300 &gt;&gt; 50% saline<br/>Solubility: 10 mg/mL (22.70 mM); Suspended solution; Need ultrasonic</li> </ol> |                               |           |            |            |  |  |
|                            | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2 mg/mL (4.54 mM); Clear solution  |                               |           |            |            |  |  |
|                            | 4. Add each solvent one by one: 10% DMSO >> 20% HS-15 >> 70% saline<br>Solubility: ≥ 1 mg/mL (2.27 mM); Clear solution   |                               |           |            |            |  |  |
|                            | 5. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 50% PBS<br>Solubility: 1 mg/mL (2.27 mM); Clear solution; Need ultrasonic  |                               |           |            |            |  |  |

## **BIOLOGICAL ACTIVITY**

Description

UNC2250 is a potent and selective Mer inhibitor with an IC  $_{50}$  of 1.7 nM, about 160- and 60-fold selectivity over the closely





**Product** Data Sheet

|                           | related kinases Axl/Tyro3.   |   |  |  |
|---------------------------|--|---|--|--|
| IC <sub>50</sub> & Target | IC50: 1.7 nM (Mer) <sup>[1]</sup>  |   |  |  |
| In Vitro                  | <ul> <li>UNC2250 (5-500 nM; 1 hour) inhibits Mer phosphorylation in 697 B-ALL cells with an IC<sub>50</sub> value of 9.8 nM<sup>[1]</sup>.</li> <li>UNC2250 efficiently inhibits ligand-dependent phosphorylation of a chimeric protein consisting of the extracellular and transmembrane domains of the epidermal growth factor (EGF) receptor and the intracellular tyrosine kinase domain of Mer <sup>[1]</sup>.</li> <li>UNC2250 incubation inhibits colony formation in soft agar cultures of the BT-12 rhabdoid tumor and the Colo699 NSCLC cell lines<sup>[1]</sup>.</li> <li>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</li> <li>Western Blot Analysis<sup>[1]</sup></li> </ul> |   |  |  |
|                           | Cell Line:<br>Concentration:<br>Incubation Time:<br>Result:  | 697 B-ALL cells<br>5, 10, 20, 50, 100, 250, 500 nM<br>1 hour<br>Inhibits Mer phosphorylation in 697 B-ALL cells with an IC <sub>50</sub> value of 9.8 nM. |  |  |

### **CUSTOMER VALIDATION**

• Theranostics. 2018 Jul 30;8(15):4262-4278.

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#### REFERENCES

[1]. Zhang, W., et al., Pseudo-cyclization through intramolecular hydrogen bond enables discovery of pyridine substituted pyrimidines as new Mer kinase inhibitors. J Med Chem, 2013. 56(23): p. 9683-92.

[2]. Xiaodong Wang, et al. Pyrimidine compounds for the treatment of cancer.WO2013177168A1.

Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA