

# **Data Sheet**

 Product Name:
 LMT-28

 Cat. No.:
 CS-0022963

 CAS No.:
 1239600-18-0

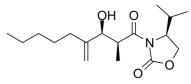
 Molecular Formula:
 C<sub>17</sub>H<sub>29</sub>NO<sub>4</sub>

 Molecular Weight:
 311.42

Target: Interleukin Related

Pathway: Immunology/Inflammation

**Solubility:** DMSO: 100 mg/mL (321.11 mM; Need ultrasonic)



## **BIOLOGICAL ACTIVITY:**

LMT-28 is an orally active and the first synthetic **IL-6** inhibitor that functions through direct binding to gp130. LMT-28 shows low toxicity and selectively inhibits IL-6-induced phosphorylation of STAT3, JAK2, and gp130<sup>[1]</sup>. **In Vitro:** LMT-28 reduces IL-6-induced luciferase activity by ~90% at a concentration of 50  $\mu$ M and exhibits an IC<sub>50</sub> value of 5.9  $\mu$ M. LMT-28 (1-10  $\mu$ M; 72 hours) inhibits IL-6-induced proliferation of the human erythroleukemic cell line TF-1<sup>[1]</sup>.

LMT-28 (1-100  $\mu$ M; 1 hour) selectively inhibits IL-6-induced phosphorylation of STAT3, JAK2, and gp130<sup>[1]</sup>. **In Vivo:** LMT-28 (0-0.5 mg/kg; p.o.; once daily for 15 days) alleviates CIA in mice<sup>[1]</sup>.

LMT-28 (0.25 or 1 mg/kg; p.o.) ameliorates the progression of pancreatitis in mice. LMT-28 binds directly and specifically to gp130, and thereby inhibits the interaction of gp130 with the IL-6/IL-6Rα complex<sup>[1]</sup>.

#### References:

[1]. Hong SS, et al. A Novel Small-Molecule Inhibitor Targeting the IL-6 Receptor 

ß Subunit, Glycoprotein 130. J Immunol. 2015 Jul 1;195(1):237-45.

### CAIndexNames:

2-Oxazolidinone, 3-[(2S,3S)-3-hydroxy-2-methyl-4-methylene-1-oxononyl]-4-(1-methylethyl)-, (4S)-

## **SMILES:**

O = C1OC[C@H](C(C)C)N1C([C@@H](C)[C@H](O)C(CCCCC) = C) = O

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

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

Page 1 of 1 www.ChemScene.com