## **Product** Data Sheet

## **ML338**

 Cat. No.:
 HY-136348

 CAS No.:
 1630160-25-6

 Molecular Formula:
 C<sub>17</sub>H<sub>12</sub>ClN<sub>5</sub>OS

Molecular Weight: 369.83

Target: Bacterial

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

$$N-N$$
  $S$   $N=N$ 

## **BIOLOGICAL ACTIVITY**

Description	ML338 is a selective small molecule inhibitor probe of non-replicating $Mycobacterium$ $tuberculosis$ $bacilli$ and is against the non-replicating $M$ . tuberculosis with IC $_{90}$ and IC $_{99}$ values of $1~\mu M$ and $4~\mu M$ , respectively by CFU. ML338 is a invaluable tool for identifying both essential functions and vulnerabilities of the $M$ . tuberculosis bacilli in the nutrient deprivation states. ML338 can be used for the study of $M$ . tuberculosis chemotherapy <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC90: 1 μM (non-replicating Mycobacterium tuberculosis bacilli) IC99: 4 μM (non-replicating Mycobacterium tuberculosis bacilli)
In Vitro	ML338 (0-50 $\mu$ M) has potency and selectivity against non-replicating M. tuberculosis with an IC <sub>90</sub> of 1 $\mu$ M. Additionally, ML338 have an IC <sub>99</sub> against non-replicating M. tuberculosis (4 $\mu$ M) which is excellent relative to current TB drugs <sup>[1]</sup> . ML338 (0-50 $\mu$ M; 48 hours) shows no toxicity to J774 macrophage cells up to 50 $\mu$ M, the highest concentration <sup>[1]</sup> . ML338 is against the non-replicating M. tuberculosis with IC <sub>90</sub> and IC <sub>99</sub> velues of 1 $\mu$ M and 4 $\mu$ M, respectively by CFU. Additionally, it against the replicating M. tuberculosis with IC <sub>90</sub> and IC <sub>99</sub> velues of 62 $\mu$ M and 62 $\mu$ M, respectively by CFU <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Partha P. Nag,et al. Elucidation of the Physiology of Non-Replicating, Drug Tolerant Mycobacterium tuberculosis With the Aid of the Small Molecule Probe ML338. Review

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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