

## Delamanid (Reference Standard)

Catalog No. NR-51636

**For research use only. Not for human use.**

### Contributor and Manufacturer:

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### Product Description:

Delamanid (OPC-67683; Delyba™) is a bicyclic nitroimidazooxazole compound shown to be effective against *Mycobacterium tuberculosis* (*M. tuberculosis*), through inhibiting the synthesis of key mycolic acids. Among TB drugs, delamanid has the lowest minimum inhibitory concentration (MIC) against both drug-susceptible and drug-resistant *M. tuberculosis* isolates, and is active against replicating and dormant, extracellular and intracellular bacilli. In clinical studies, delamanid demonstrated significant improvement of sputum culture conversion with two months of treatment in combination with an optimized background regimen for pulmonary multidrug-resistant (MDR)-TB adult patients, as compared to treatment with placebo. Spontaneous resistance frequencies to delamanid were similar to those of isoniazid and PA-824.<sup>1</sup>

### Material Provided:

Each vial contains approximately 20 mg of delamanid.

### Packaging/Storage:

NR-51636 was packaged in glass serum vials and is provided on refrigerated bricks. NR-51636 should be stored at room temperature protected from light immediately upon arrival. The vial should be centrifuged prior to opening.

### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Delamanid (Reference Standard), NR-51636."

### Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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NR-51636 is claimed in U.S. Patent Number 7,262,212, and the continuations, continuations-in-part, re-issues and foreign counterparts thereof.

### References:

1. Fujiwara, M., et al. "Mechanisms of Resistance to Delamanid, a Drug for *Mycobacterium tuberculosis*." Tuberculosis (Edinb). 108 (2018): 186-194. PubMed: 29523322.

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