# **PRODUCT INFORMATION**



## TunR2

Item No. 31538

Formal Name: N-((2S,3R,4R,5R,6R)-2-

> (((2R,3R,4R,5S,6R)-3-acetamido-4,5-dihydroxy-6-(hydroxymethyl) tetrahydro-2H-pyran-2-yl)oxy)-6-((R)-2-((2R,3S,4R,5R)-5-(2,4dioxotetrahydropyrimidin-1(2H)yl)-3,4-dihydroxytetrahydrofuran-

2-yl)-2-hydroxyethyl)-4,5-

dihydroxytetrahydro-2H-pyran-3yl)-12-methyltridecanamide

MF: C<sub>39</sub>H<sub>68</sub>N<sub>4</sub>O<sub>16</sub> (for TunR2 16:0)

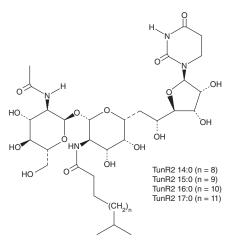
849.0 FW:

**Purity:** ≥95% (mixture of congeners)

A crystalline solid Supplied as:

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



### Description

TunR2 is an antibiotic and derivative of tunicamycin (Item No. 11445).<sup>1</sup> It is active against B. subtilis (MIC =  $0.3 \mu g/ml$ ) and increases the efficacy of the  $\beta$ -lactam antibiotics oxacillin (Item No. 23954), methicillin (Item No. 21007), and penicillin G (Item No. 21615) against B. subtilis when used at a concentration of 0.4 μg/ml. Unlike tunicamycin, TunR2 is non-toxic to S. cerevisiae (MIC = >10 μg/ml) and does not inhibit glycosylation in a protein N-glycosylation assay. TunR2 also has reduced antiproliferative activity against MDA-MB-231 and CHO cells compared with tunicamycin.

### Reference

1. Price, N.P., Hartman, T.M., Li, J., et al. Modified tunicamycins with reduced eukaryotic toxicity that enhance the antibacterial activity of β-lactams. J. Antibiot. (Tokyo) 70(11), 1070-1077 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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