

### Product Information Sheet

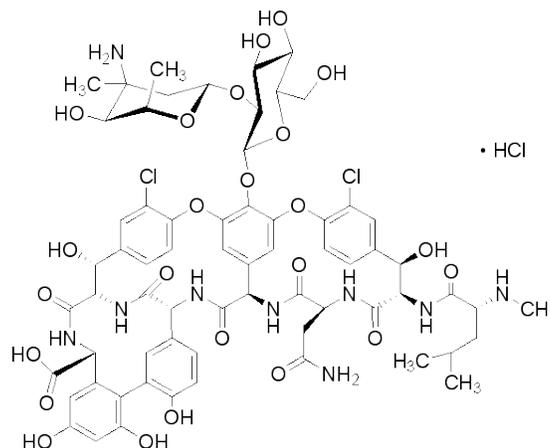
### V870

### Vancomycin Hydrochloride

Synonyms: N/A  
 CAS: 1404-93-9  
 Formula: C<sub>66</sub>H<sub>75</sub>Cl<sub>2</sub>N<sub>9</sub>O<sub>24</sub>•HCl  
 Mol. Weight: 1485.73

#### Properties

Form: Powder  
 Appearance: Cream to Tan Powder  
 Application: Plant Tissue Culture Antibiotic  
 Solubility: Soluble in Water  
 Storage Temp: 2 to 6 °C  
 Stock Solution: 2 to 6 °C for short-term; optimal stability at  
 Storage Temp: pH 3 to 5.  
 Other Notes: Plant Tissue Culture Tested



#### Application Notes

Vancomycin is a glycopeptide antibiotic produced by *Streptomyces orientalis* that is effective against most Gram-positive bacteria.<sup>2</sup> Its main mode of action is to block the formation of peptidoglycan of the bacterial cell wall; however, vancomycin also damages protoplast cytoplasmic membrane and inhibits bacterial RNA synthesis.<sup>2-4</sup> It has been reported that vancomycin, when combines with other aminoglycoside has shown to be very effective against enterococci as well as vancomycin-tolerant strains.<sup>2</sup>

Please Note: While *PhytoTechnology Laboratories®* tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

#### References

1. Merck 13, 9995
2. Martindale: The Complete Drug Reference, 35th ed., Paul S. Blake, Ed. (Royal Pharmaceutical Society, 2007), p. 320.
3. Watanakunakorn, C. 1981. The Antibacterial action of vancomycin. *Rev. Infect. Dis.* 3 Suppl S: 210-215.
4. Watanakunakorn, C. 1984. Mode of action and in-vitro activity of vancomycin. *J. Antimicrob. Chemother.* 14 Suppl D: 7-18.

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