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Product Information

Product ID T5605

CAS No. 79645-27-5

Chemical Name O-3-Amino-3-deoxy-α-D-glucopyranosyl-(1->6)-O- [2,6-diamino-2,3,6-

trideoxy-α-D-ribo-hexopyranosyl- (1->4)]-2-deoxy-D-streptamine

sulfate

Synonym Gernebcin, Nebcin, Nebicina, Tobra, Tobradistin

Formula $(C_{18}H_{37}N_5O_9)_2 \cdot 5H_2SO_4$

Formula Wt. 1425.45 Melting Point 287°C(dec.)

Purity ≥98%

Solubility Soluble in water (50 mg/mL).

xH₂SO₄

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
T5605	100 mg	\$78.50
T5605	500 mg	\$270.60
T5605	1 g	\$375.60

Store Temp Ambient Ship Temp Ambient

Description Tobramycin is an aminoglycoside antibiotic that exhibits antibacterial and anti-inflammatory activities. Tobramycin prevents

formation of the 70S bacterial ribosomal complex, inhibiting protein translation; it is highly effective in the treatment of Pseudomonas infections. In vitro, tobramycin inhibits T cell and neutrophil migration. In separate cellular models, this compound also decreases activation of NF-kB, expression of MUC5AC, and phosphorylation of ERK and p38 MAPK.

References Papich MG. Antibiotic treatment of resistant infections in small animals. Vet Clin North Am Small Anim Pract. 2013 Sep;43 (5):1091-107. PMID: 23890241.

> Gziut M, MacGregor HJ, Nevell TG, et al. Anti-inflammatory effects of tobramycin and a copper-tobramycin complex with superoxide dismutase-like activity. Br J Pharmacol. 2013 Mar;168(5):1165-81. PMID: 23072509.

> Nakamura S, Yanagihara K, Araki N, et al. High-dose tobramycin inhibits lipopolysaccharide-induced MUC5AC production in human lung epithelial cells. Eur J Pharmacol. 2011 Mar 21. [Epub ahead of print]. PMID: 21414310.

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King P, Citron DM, Griffith DC, et al. Effect of oxygen limitation on the in vitro activity of levofloxacin and other antibiotics administered by the aerosol route against Pseudomonas aeruginosa from cystic fibrosis patients. Diagn Microbiol Infect Dis. 2010 Feb;66(2):181-186. PMID: 19828274.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.