



Product Information

Product ID T5605

CAS No. 79645-27-5

Chemical Name O-3-Amino-3-deoxy- α -D-glucopyranosyl-(1 \rightarrow 6)-O- [2,6-diamino-2,3,6-trideoxy- α -D-ribo-hexopyranosyl- (1 \rightarrow 4)]-2-deoxy-D-streptomine 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.)

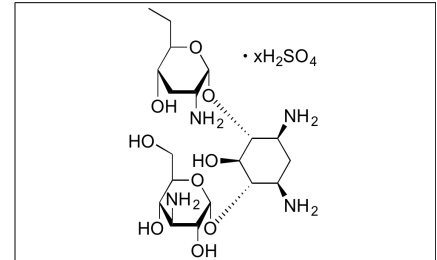
Purity \geq 98%

Solubility Soluble in water (50 mg/mL).

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- κ B, expression of MUC5AC, and phosphorylation of ERK and p38 MAPK.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T5605	100 mg	\$57.60
T5605	500 mg	\$198.50
T5605	1 g	\$275.60

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.

Periti P. Tobramycin--clinical pharmacology and chemotherapy. *J Chemother.* 1996 Jan;8 Suppl 1:3-30. PMID: 8948764.

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.