



## Product Information

**Product ID** P0370

**CAS No.** 1263-89-4

**Chemical Name** D-Streptomine, O-2-amino-2-deoxy-alpha-D-glucopyranosyl-(1->4)-O-(O-2,6-diamino-2,6-dideoxy-beta-L-idopyranosyl-(1->3)-beta-D-ribofuranosyl-(1->5))-2-deoxy-, sulfate (salt)

**Synonym** Aminosidin sulfate, Gabbroral, Aminoxidin, Farmiglucin, Humagel, Humatin, Pargonyl, Sinosid.

**Formula** C<sub>23</sub>H<sub>45</sub>N<sub>5</sub>O<sub>14</sub> • H<sub>2</sub>SO<sub>4</sub>

**Formula Wt.** 713.71

**Melting Point**

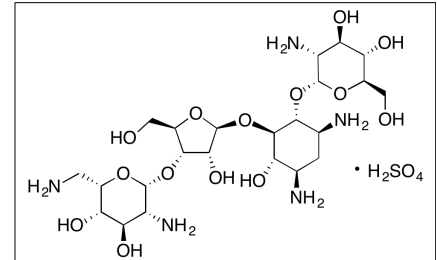
**Purity** ≥98%

**Solubility** Soluble in water (>100 mg/mL).

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Paromomycin is an aminoglycoside antibiotic that inhibits cation channels such as P2X2 receptors; it exhibits antibacterial, anti-parasitic, and anti-protozoal activities. Paromomycin is clinically used to treat leishmaniasis. This compound inhibits ribosomal recycling, binding to the large subunit of the ribosome and inhibiting interactions between the ribosome and ribosome recycling factor (RRF). Paromomycin also decreases the mitochondrial membrane potential and suppresses protein synthesis (inhibiting translocation of RNA).



**Bulk quantities available upon request**

Product ID	Size
P0370	1 g
P0370	5 g
P0370	25 g

**References** Bongartz EV, Rettinger J, Hausmann R. Aminoglycoside block of P2X2 receptors heterologously expressed in *Xenopus laevis* oocytes. *Purinergic Signal*. 2010 Dec;6(4):393-403. PMID: 21437010.

Jhingran A, Chawla B, Saxena S, et al. Paromomycin: uptake and resistance in *Leishmania donovani*. *Mol Biochem Parasitol*. 2009 Apr;164(2):111-7. PMID: 19146886.

Borovinskaya MA, Pai RD, Zhang W, et al. Structural basis for aminoglycoside inhibition of bacterial ribosome recycling. *Nat Struct Mol Biol*. 2007 Aug;14(8):727-32. PMID: 17660832.

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