Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Kanamycin (sulfate)

Catalog No: tcsc1140

Available Sizes

Size: 1g

Size: 5g

Specifications

CAS No:
25389-94-0

Formula:
$C_{18}H_{38}N_4O_{15}S$

Pathway:
Anti-infection

Target:
Bacterial

Purity / Grade:
>98%

Solubility:
H2O : ≥ 30 mg/mL (51.50 mM)

Alternative Names:
Kanamycin A monosulfate

Observed Molecular Weight:
582.58

Product Description

Kanamycin (sulfate) is an aminoglycoside antibiotic, available in oral, intravenous, and intramuscular forms, and used to treat a wide variety of infections.

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In Vitro: Kanamycin sulfate at the concentration above 0.0025% has a significant inhibition on the growth of B. bifidum and has no influence on the other four probiotics at incubation 12 h or 24 h. The optimum selective concentration of kanamycin sulfate in MRS media is 0.005% for selective enumeration of B.bifidum[3].

In Vivo: The neurons damage of the DCN caused by kanamycin (500 mg/kg/day) is reversible and autophagy is upregulated in the neurotoxic course of kanamycin on DCN through JNK1-mediated phosphorylation of Bcl-2 pathway in rats. The serum BUN and Cr levels are both increased at the 1st day after the period of kanamycin administration. The neurons expressing LC3 are increased at 1, 7 and 14 days after kanamycin administration in comparison to the control group. Kanamycin treatment results in the increase of autophagy in a time-dependent manner[1]. Kanamycin sulfate (5 mg/kg) and sodium ampicillin (10 mg/kg) administered intramuscularly (i.m.) separately, and then together, to five pony mares, and the ampicillin concentration exceeds 5 mg/mL in inflamed synovial fluid for some 2.5 h after injection, and kanamycin sulfate concentration exceeds 2 mg/mL for 7 h in the pony[2].