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## DATASHEET

### Kanamycin sulfate

## Product overview

<b>Name</b>	Kanamycin sulfate
<b>Cat No</b>	HB4429
<b>Applications</b>	Cell Culture
<b>Description</b>	Protein synthesis inhibitor. Broad spectrum antibiotic.

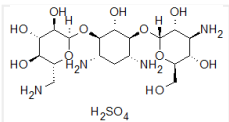
## Biological Data

<b>Biological description</b>	Broad spectrum antibiotic which binds to the 30S subunit of the bacterial ribosome to inhibit protein synthesis.
<b>Application notes</b>	Widely used as a selection marker for cells transformed with kanamycin B resistance gene. <ul style="list-style-type: none"><li>Used at 50µg/ml to selectively culture <i>E. coli</i> transfected with plasmids conferring kanamycin resistance</li></ul>

## Solubility & Handling

<b>Storage instructions</b>	Room temperature
<b>Solubility overview</b>	Soluble in water (75 mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

## Chemical Data

<b>Chemical name</b>	(2R,3S,4S,5R,6R)-2-(aminomethyl)-6-[(1R,2R,3S,4R,6S)-4,6-bis(azanyl)-3-[(2S,3R,4S,5S,6R)-4-azanyl-6-(hydroxymethyl)-3,5-bis(oxidanyl)oxan-2-yl]oxy-2-oxidanyl-cyclohexyl]oxy-oxane-3,4,5-triol sulphate
<b>Molecular Weight</b>	582.58
<b>Chemical structure</b>	
<b>Molecular Formula</b>	C <sub>18</sub> H <sub>36</sub> N <sub>4</sub> O <sub>11</sub> · H <sub>2</sub> O <sub>4</sub> S
<b>CAS Number</b>	25389-94-0
<b>PubChem identifier</b>	441374
<b>SMILES</b>	C1[C@H]([C@@H]([C@H]([C@H]([C@H]1N)O[C@@H]2[C@@H]([C@H]([C@@H]([C@H](O2)C)N)O)O)O)[C@@H]3[C@@H]([C@H]([C@@H]([C@H](O3)CO)O)N)O)N.OS(=O)(=O)O
<b>InChi</b>	InChI=1S/C18H36N4O11.H2O4S/c19-2-6-10(25)12(27)13(28)18(30-6)33-16-5(21)1-4(20)15(14(16)29)32-17-11(26)8(22)9(24)7(3-23)31-17;1-5(2,3)4/h4-18,23-29H,1-3,19-22H2;(H2,1,2,3,4)/t4-,5+,6-,7-,8+,9-,10-,11-,12+,13-,14-,15+,16-,17-,18-/m1./s1
<b>InChiKey</b>	QRRMITCICIMIDC-UHFFFAOYSA-N
<b>MDL number</b>	MFC00070253
<b>Appearance</b>	White to off-white

## References

## The Effect of Kanamycin and Tetracycline on Growth and Photosynthetic Activity of Two Chlorophyte Algae

Bashir et al (2016) Biomed Res Int. 5656304

**PubMedID**

[27747232](#)

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