

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@m2stage.hellobio.com



DATASHEET

Kanamycin sulfate

Product overview

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

Biological Data

Biological description Broad spectrum antibiotic which binds to the 30S subunit of the bacterial ribosome to inhibit protein synthesis.

Widely used as a selection marker for cells transformed with kanamycin B resistance gene.

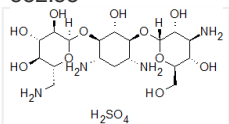
Application notes

- Used at 50µg/ml to selectively culture *E. coli* transfected with plasmids conferring kanamycin resistance

Solubility & Handling

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

Chemical Data

Chemical name	(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
Molecular Weight	582.58
Chemical structure	
Molecular Formula	C ₁₈ H ₃₆ N ₄ O ₁₁ · H ₂ O ₄ S
CAS Number	25389-94-0
PubChem identifier	441374
SMILES	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)O[C@@H]3[C@@H]([C@H]([C@@H]([C@H]([C@H](O3)CO)O)N)O)N.OS(=O)(=O)O
InChi	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
InChiKey	QRRMITCICIMDC-UHFFFAOYSA-N
MDL number	MFCD00070253
Appearance	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](#)
