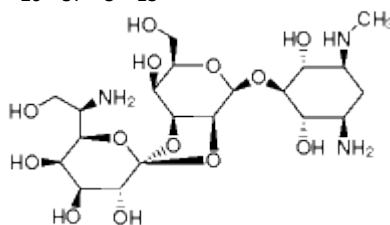


Product Name: Hygromycin B

CAS Number: 31282-04-9

Chemical Formula: C₂₀H₃₇N₃O₁₃

Structure:



Molecular Weight: 527.52

Appearance: White powder

Description: Hygromycin B is an antibiotic produced by the bacterium *Streptomyces hygroscopicus*. It is an aminoglycoside that kills bacteria, fungi and higher eukaryotic cells by inhibiting protein synthesis. Hygromycin B strongly inhibits protein synthesis through a dual effect on mRNA translation. Like other aminoglycoside antibiotics, hygromycin B induces misreading of aminoacyl-tRNA by distorting the ribosomal A site (decoding center). Hygromycin B also affects the ribosomal translocation process. In the presence of the antibiotic, mRNA is often mistranslocated, being moved more or less than the three necessary bases.

Storage Temperature: 2-8°C

Mechanism of Action: Hygromycin B strongly inhibits protein synthesis through a dual effect on mRNA translation. Like other aminoglycoside antibiotics, hygromycin B induces misreading of aminoacyl-tRNA by distorting the ribosomal A site (decoding center). Hygromycin B also affects the ribosomal translocation process. In the presence of the antibiotic, mRNA is often mistranslocated, being moved more or less than the three necessary bases.