

PRODUCT DATA SHEET

Code No.: BIA-H1562

Pack sizes: 5 mg, 25 mg

Hygromycin B

Synonyms : Antihelmycin

Specifications

CAS # : 31282-04-9 Molecular Formula : $C_{20}H_{37}N_3O_{13}$

Molecular Weight : 527.5

Source : Streptomyces hygroscopicus

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Hygromycin B is a trisaccharide aminoglycoside with a terminal cyclitol produced by Streptomyces hygroscopicus, reported by researchers at Eli Lily in the early 1950s. Hygromycin B belongs to the destomycin family of aminoglycosides which contain a unique cyclic structure linking the terminal saccharide. Hygromycin B exhibits broad spectrum antibiotic and anthelmintic activity, and is used as a feed additive for swine and poultry. Hygromycin B inhibits polypeptide synthesis by binding peptidyltRNA and preventing translocation by Elongation Factor 2.

References

- 1. Hygromycin B, its production and treatment of intestinal parasites. McQuire J.M. and Mann R.L. US Patent 3,018,220 1962.
- 2. Hygromycin I. Preliminary studies on the production and biological activity of a new antibiotic. Pettinger R.C. et al., Antibiot. Chemother. 1953, 3, 1268.
- 3. Studies on the mode of action of hygromycin B, an inhibitor of translocation in eukaryotes. Gonzalez A. et al., Biochim. Biophys. Acta 1978, 521, 459.

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