



Hygromycin B, EvoPure[®] Solution (100 mg/ml) PRODUCT DATA SHEET

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| Product Name: | Hygromycin B, EvoPure [®] Solution (100 mg/ml) |
| Product Number: | H015 |
| CAS Number: | 31282-04-9 |
| Molecular Formula: | C ₂₀ H ₃₇ N ₃ O ₁₃ |
| Molecular Weight: | 527.52 g/mol |
| Form: | Solution |
| Solubility: | Water: Freely Soluble |
| Source: | <i>Streptomyces Hygroscopicus</i> |
| Melting Point: | 160-180 °C |
| Storage Conditions: | 2-8 °C |
| Description: | <p>Hygromycin B, EvoPure[®] solution (100 mg/mL) is a solution containing high purity (>99.0%) hygromycin B. Hygromycin B is a unique aminoglycoside antibiotic derived from <i>Streptomyces hygroscopicus</i> and is routinely used as a selective agent in cell culture or microbiology applications to isolate hygromycin B resistant cells after transfection or transformation, respectively.</p> <p>This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.</p> <p>For more hygromycin B products, click here.</p> <p>For more information on hygromycin B, EvoPure[®], click here.</p> |
| Mechanism of Action: | Hygromycin B inhibits protein synthesis by strengthening the interaction of tRNA binding in the ribosomal A-site. Hygromycin B also prevents mRNA and tRNA translocation by an unknown mechanism. These are unique mechanisms for an aminoglycoside antibiotic and they differ from the mode of action neomycin, gentamicin, and G418. |
| Spectrum: | Hygromycin B is effective against eukaryotic and prokaryotic cells. |
| Microbiology Applications | Hygromycin B can be used as a selection agent to isolate hygromycin b resistant bacteria and fungi. |
| Technical Data: | HPLC, NMR, FTIR, and MS analysis may be available. For more info, please email info@toku-e.com . |

References:

Dai S., Zheng P., Marmey P., Zhang S., Tian W., Chen S., Beachy R.N. and Fauquet C. Comparative analysis of transgenic rice plants obtained by Agrobacterium-mediated transformation and particle bombardment. *Molecular Breeding* 7: 25–33, 2001. © 2001 Kluwer Academic Publishers.

Schindler, D. "Studies on the Mode of Action of Hygromycin B, an Inhibitor of Translocation in Eukaryotes." *Nucleic Acids and Protein Synthesis* 521.2 (1978): 459-69. www.ncbi.gov. Web. 6 Sept. 2012.

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