



Hygromycin B [KLH] (DAG4485)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Hygromycin B, KLH-conjugate
Antigen Description	The hygromycin B and KLH (keyhole limpet hemocyanin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. One or both of the two amine groups in the hygromycin B are directly linked to carboxyl group(s) in the KLH without any linker by EDC conjugation method. Given the molecular weights of hygromycin B and KLH are 527.52 Da and 8,000 – 9,000 kDa, respectively, the molar ratio of hygromycin B:KLH in the conjugation solution is 15165 - 17061:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of hygromycin B that is actually conjugated to each KLH molecule is not determined. Note: Due to its high molecular weight and its tendency to form aggregates, the conjugate is not completely soluble in the buffer that it is in. Therefore, it is strongly recommended to vigorously vortex immediately prior to aliquot or use.
Species	N/A
Conjugate	KLH
Applications	Used as immunogen for the generation of anti-hygromycin B antibodies. The hygromycin B, KLH-conjugate has been successfully used as an immunogen in inducing hygromycin B specific antibodies in mice.
Format	Liquid
Concentration	Approximately 2.0 mg/mL KLH
Size	1 mg
Buffer	Supplied in 20 mM PBS, pH 7.4
Preservative	None
Storage	Keep below -20°C for up to 1 year. Avoid repeated freeze-and-thaw. For short term storage (< 3

weeks) keep at 4°C.

BACKGROUND

Introduction

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 was originally developed in the 1950s for use with animals and is still added into swine and chicken feed as an anthelmintic or anti-worming agent (product name: Hygromix). Hygromycin B is produced by *Streptomyces hygroscopicus*, a bacterium isolated in 1953 from a soil sample. Resistance genes were discovered in the early 1980s.

Keywords

Hygromycin B; Santihelmycin; hydromycinb; hygromix2.4; hygromix-8; hygrovetine; Hygromycin Solution; hygromycin B aqueous solution; hygromycin B from streptomyces hygroscopicus; hygromycin B plant cell culture tested; hygromycin B solution from streptomycin
