



Penicillin G [KLH] (DAG4487)

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

PRODUCT INFORMATION

Product Overview	Penicillin G, KLH-conjugate
Antigen Description	The penicillin G and KLH (keyhole limpet hemocyanin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. The carboxyl group in the penicillin G is directly linked to an amine group in the KLH without any linker by EDC conjugation method. Given the molecular weights of penicillin G and KLH are 334.4Da and 8,000 – 9,000 kDa, respectively, the molar ratio of penicillin G:KLH in the conjugation solution 23923-26913:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of penicillin G 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-penicillin G antibodies. The penicillin G, KLH-conjugate has been successfully used as an immunogen in inducing penicillin G 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

Penicillin is a group of Beta-lactam antibiotics used in the treatment of bacterial infections caused by susceptible, usually Gram-positive, organisms. beta-lactam antibiotics work by inhibiting the formation of peptidoglycan cross-links in the bacterial cell wall, which results in cytolysis.

Keywords

Ampicillin; Benzylpenicillin; PCN; Penicillin G; Phenoxyethylpenicillin; Penicillin
