



Bacitracin [KLH] (DAG4480)

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

PRODUCT INFORMATION

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| Product Overview | Bacitracin, KLH-conjugate |
| Antigen Description | <p>The bacitracin zinc salt and KLH (keyhole limpet hemocyanin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. One or more of the three amine groups in the bacitracin are directly linked to carboxyl group(s) in the KLH without any linker by EDC conjugation method. Given the molecular weights of bacitracin sulfate and KLH are 1486.07 Da and 8,000 – 9,000 kDa, respectively, the molar ratio of bacitracin:KLH in the conjugation solution is 5383 - 6056:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of bacitracin 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.</p> |
| Species | N/A |
| Conjugate | KLH |
| Applications | Used as immunogen for the generation of anti-bacitracin antibodies. The bacitracin, KLH-conjugate has been successfully used as an immunogen in inducing bacitracin 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

Bacitracin is a mixture of related cyclic polypeptides produced by organisms of the licheniformis group of *Bacillus subtilis* var Tracy, first isolated in 1945. These peptides disrupt both gram positive and gram negative bacteria by interfering with cell wall and peptidoglycan synthesis. Bacitracin is used as a topical preparation (since it is toxic and has poor oral bioavailability). In terms of adverse reactions only, in comparison with bacitracin, white petrolatum possesses an equally low infection rate and minimal risk for induction of allergy.

Keywords

Bacitracin
