



Penicillin G [BSA] (DAG4471)

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

PRODUCT INFORMATION

Product Overview	Penicillin G, BSA-conjugate
Antigen Description	The penicillin G (benzylpenicillin) and BSA (bovine serum albumin) (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 BSA without any linker by EDC conjugation method. Given the molecular weights of penicillin G and BSA are 334.4 Da and 66.4 kDa, respectively, the molar ratio of penicillin G:BSA in the conjugation solution is 199:1. 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 BSA molecule is not determined.
Species	N/A
Conjugate	BSA
Applications	Used as capture antigen for the detection of anti-penicillin G antibodies and as immunogen for the generation of penicillin G antibodies. The penicillin G, BSA-conjugate has been shown to be recognized by penicillin G-specific antibodies by ELISA and lateral flow based immunoassay, respectively.
Format	Liquid
Concentration	2.0 mg/ml BSA
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; Phenoxymethylpenicillin; Penicillin