



Cefalexin [KLH] (DAG4481)

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

PRODUCT INFORMATION

Product Overview	Cefalexin, KLH-conjugate
Antigen Description	The cefalexin hydrate 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 cefalexin is directly linked to an amine group in the KLH, and/or a carboxyl group in the KLH is directly linked to the amine group in the cefalexin, without any linker by EDC conjugation method. Given the molecular weights of cefalexin sodium and KLH are 365.41 Da and 8,000 – 9,000 kDa, respectively, the molar ratio of cefalexin:KLH in the conjugation solution is 21893 - 24630:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of cefalexin 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-cefalexin antibodies. The cefalexin, KLH-conjugate has been successfully used as an immunogen in inducing cefalexin 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.
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BACKGROUND

Introduction	Cefalexin (INN) or more commonly cephalixin is a first-generation cephalosporin antibiotic introduced in 1967 by Eli Lilly and Company. It is an orally administered agent with a similar antimicrobial spectrum to the intravenous agents cefalotin and cefazolin. It was first marketed as Keflex (Lilly), and is marketed under several other trade names. As of 2008, cefalexin was the most popular cephalosporin antibiotic in the United States, with more than 25 million prescriptions of its generic versions alone, for US\$255 million in sales (though less popular than two other antibiotics, amoxicillin and azithromycin, each with 50 million prescriptions per year).
Keywords	7-(d-alpha-aminophenylacetamido)desacetoxycephalosporanicacid; 7-beta-(d-alpha-amino-alpha-phenylacetyl-amino)-3-methyl-3-cephem-4-carboxyli; cefa-iskia; cefaloto; Cefadal; Cefadin; Taicelexin; Cefalexin; cephalixin; Cefalexin; cephalixin
