



Melamine [KLH] (DAG4492)

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

PRODUCT INFORMATION

Product Overview	Melamine, KLH-conjugate
Antigen Description	<p>The melamine 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 melamine are directly linked to carboxyl group(s) in the KLH without any linker by EDC conjugation method. Given the molecular weights of melamine and KLH are 126.12 Da and 8,000 – 9,000 kDa, respectively, the molar ratio of melamine:KLH in the conjugation solution is 63432 - 71361:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of melamine 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>
Nature	Synthetic
Expression System	N/A
Species	N/A
Conjugate	KLH
Applications	Used as immunogen for the generation of anti-melamine antibodies. The melamine, KLH-conjugate has been successfully used as an immunogen in inducing melamine specific antibodies in mice.
Procedure	None
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.
Warnings	PLEASE note that this product is intended for research use only; not for diagnostic or clinical use.

BACKGROUND

Introduction

Melamine is an organic base and a trimer of cyanamide, with a 1,3,5-triazine skeleton. Like cyanamide, it contains 66% nitrogen by mass and, if mixed with resins, has fire retardant properties due to its release of nitrogen gas when burned or charred, and has several other industrial uses. Melamine is also a metabolite of cyromazine, a pesticide. It is formed in the body of mammals who have ingested cyromazine. It has been reported that cyromazine can also be converted to melamine in plants. Melamine combines with cyanuric acid and related compounds to form melamine cyanurate and related crystal structures, which have been implicated as contaminants or biomarkers in Chinese protein adulterations.

Keywords Melamine