I-3050: Ethyl-β-D-glucuronide (EtG)-KLH Conjugate

| Product Name: | Ethyl-β-D-glucuronide (EtG)-KLH Conjugate |
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| Catalogue No: | I-3050 |
| Conjugation Method: | EDC |
| Linker: | None |
| Number of EtG per KLH: | Not determined |
| Concentration: | Approximately 2.0 mg/ml KLH (in 20 mM PBS, pH 7.4) |
| 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. |
| Applications: | Used as immunogen for the generation of anti- the ethyl- β -D-glucuronide (EtG) antibodies. |

Brief Description:

The ethyl- β -D-glucuronide (EtG) and KLH (keyhole limpet hemocyanin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. The only one carboxyl group in the ethyl- β -Dglucuronide (EtG) is directly linked to one of amine groups in the KLH without any linker by EDC conjugation method. Given the molecular weights of the ethyl- β -D-glucuronide (EtG) and KLH are 222.19 Da and 8,000 – 9,000 kDa, respectively, the molar ratio of the ethyl- β -D-glucuronide (EtG):KLH in the conjugation solution is 36005 - 40506:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of the ethyl- β -D-glucuronide (EtG) that is actually conjugated to each KLH molecule is not determined.

The ethyl- β -D-glucuronide (EtG) -KLH conjugate has been successfully used as an immunogen in inducing the ethyl- β -D-glucuronide (EtG) specific antibodies in mice.

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.

PLEASE note that this product is intended for research use only; not for diagnostic or clinical use.

(Produced by Imgen BioSciences, Inc., August, 2016)