## I-3049: Ethyl-β-D-glucuronide (EtG)-BSA Conjugate

Product Name:	Ethyl-β-D-glucuronide (EtG)-BSA Conjugate
Catalogue No:	I-3049
Conjugation Method:	EDC
Linker:	None
Number of EtG per BSA:	Not determined
Concentration:	2.0 mg/ml BSA (in 20 mM PBS, pH 7.4)
Storage:	Keep below $-20^{\circ}$ C for up to 1 year. Avoid repeated freeze-and-thaw. For short term storage (< 3 weeks) keep at 4°C.
Applications:	Used as capture antigen for the detection of anti-Ethyl- $\beta$ -D-glucuronide (EtG) antibodies and as immunogen for the generation of Ethyl- $\beta$ -D-glucuronide (EtG) antibodies.

## **Brief Description:**

The ethyl- $\beta$ -D-glucuronide (EtG) and BSA (bovine serum albumin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. The only one carboxyl group in the ethyl- $\beta$ -D-glucuronide (EtG) is directly linked to one of amine groups in the BSA without any linker by EDC conjugation method. Given the molecular weights of Ethyl- $\beta$ -D-glucuronide (EtG) and BSA are 222.19 Da and 66.4 kDa, respectively, the molar ratio of ethyl- $\beta$ -D-glucuronide (EtG):BSA in the conjugation solution is 299:1. The resultant conjugation solution is then buffer-exchanged with 20 mM PBS, pH 7.4. The number of ethyl- $\beta$ -D-glucuronide (EtG) that is actually conjugated to each BSA molecule is not determined.

The ethyl- $\beta$ -D-glucuronide (EtG)-BSA conjugate has been shown to be recognized by ethyl- $\beta$ -D-glucuronide (EtG)-specific antibodies by ELISA and lateral flow based immunoassay, respectively.

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

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