

# rFAB Ethyl Glucuronide (EtG) Assay

With this homogeneous enzyme immunoassay for the detection of the alcohol metabolite Ethyl Glucuronide (EtG) in urine, Immunalysis and Specialty Diagnostix introduce the **new recombinant fragment antigen-binding technology**. This novel assay configuration provides enhanced performance, superior specificity and targeted selectivity.

## Assay Characteristics

- 97% or greater accuracy leading to fewer unconfirmed positives
- More flexibility through dual cut-off 500 ng/mL and 1,000 ng/mL
- Liquid, ready-to-use reagents, calibrators and controls no reconstitution required
- Application protocols for all major clinical chemistry analysers
- Packaging tailored for your laboratory's specific needs

### Background

Ethyl Glucuronide (EtG) is a direct ethanol metabolite. It is formed in the liver by enzymatic conjugation of ethanol with glucuronic acid. The presence of EtG in urine is positive proof that the person tested has recently been in contact with alcohol.

EtG is produced whenever an individual has been exposed to products containing ethyl alcohol that get into the bloodstream. However, tests for EtG cannot determine the source of ethanol.

While alcohol is only detectable for a few hours after actual consumption, testing for EtG offers a considerably wider window of detection. As a biomarker, EtG can be used to test for ethanol consumption and to monitor alcohol abstinence. Possible applications include alcohol withdrawal programmes, patients in need of liver transplantations, detection of potential alcohol abuse, pregnant women, drivers hoping to renew their licenses or prisoners on parole.









#### Accuracy

- \* 5 of the 15 specimens were borderline negative with LC-MS/MS
- \*\* 8 specimens were borderline negative with the EtG HEIA, and 7 specimens were between 280 and 400 ng/mL

	Cut-Off 500 ng/mL		LC-MS Confirmation	
			+	-
	HEIA EtG	+	99	15*
		-	16**	824

#### **Qualitative Precision**

500 ng/mL Cut-off Inter-Day Precision (n = 80)							
Concentration (ng/mL)	Rate (∆mA/min)	SD	CV in %				
375 Control LOW	544.0	6.3	1.2				
500 Calibrator	558.8	6.6	1.2				
625 Control HIGH	572.7	5.7	1.0				
1000 ng/mL Cut-off Inter-Day Precision (n = 80)							
750 Control LOW	602.8	6.7	1.1				
1000 Calibrator	618.9	7.2	1.2				

636.7



#### **Ordering Information**

1250 Control HIGH

	1	1
Reagents	Size	Order No.
Ethyl Glucuronide (EtG) HEIA	25 mL	341-0025EX
	60 mL	341-0060WEX
	100 mL	341-0100EX
Calibrators		
Ethyl Glucuronide (EtG) 500 ng/mL Calibrator	1 x 10 mL	C341-10-1-500EX
Ethyl Glucuronide (EtG) 1000 ng/mL Calibrator	1 x 10 mL	C341-10-1-1000EX
Controls		
Ethyl Glucuronide (EtG) 375 ng/mL and 625 ng/mL Control Set	2 x 10 mL	C341-10-2-500EX
Ethyl Glucuronide (EtG) 750 ng/mL and 1250 ng/mL Control Set	2 x 10 mL	C341-10-2-1000EX

4.9

0.8



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