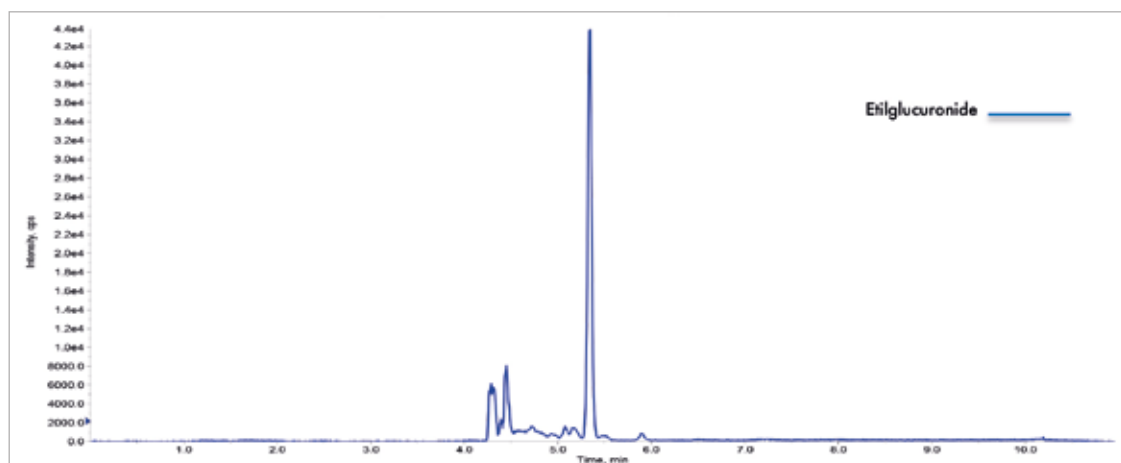


## SHORT METHOD DESCRIPTION

### FloMass<sup>®</sup> Ethylglucuronide in Hair

The diagnosis of alcohol abuse is complex and delicate both for clinical-diagnostic reasons and for medico-legal implications. In addition to the classic hematological and biochemical indices usually taken into consideration (such as AST, ALT, GGT and MCV), in recent years the use of %CDT (desialated transferrin) and Ethylglucuronide has become increasingly popular. EtG is a non-volatile, polar, relatively stable molecule formed by the conjugation of ethanol with glucuronic acid. Unlike CDT, ethylglucuronide (EtG) is therefore a direct metabolite of ethanol in serum and urine up to 80 hours after the last intake. Furthermore, its presence in hair and other tissues further increases its diagnostic value. The keratin matrix, in fact, has the undoubted advantage of being able to broaden the surveillance window, theoretically allowing to identify not only a recent continuous abuse, but also an abuse in previous times. The keratin matrix has many practical advantages compared to other biological samples, such as the greater ease of collection that can also be carried out by non-medical personnel, the non-invasiveness of sampling, the easy storage of the aforementioned material and the stability of the analytes.



#### HPLC-MS/MS system conditions

**Ionization:** ESI negative mode

**MS/MS:** specific MRM

**Injection volume:** 10-20  $\mu$ l (variable according to instrumental sensitivity)

**Running time:** 11 min

**Column heater:** 30°C

#### Performance

Analyte	Linearity (pg/mg)	LLOD (pg/mg)	LLOQ (pg/mg)	CV% Intra	CV% Inter
ETG	1.23 - 500	0.37	1.23	9.5 - 11.3	8.2 - 12.0

## ORDERING GUIDE

Order No.	Description	Quantity
<b>EUM04200</b>	<b>FloMass® Ethylglucuronide in Hairs</b> LC-MS/MS detection	<b>200 assays</b>
	<b>Contents</b>	
	Mobile Phase A	1 x EUM04011
	Mobile Phase B	1 x EUM04012
	Washing Reagent	1 x EUM04021
	Reconditioning Reagent	1 x EUM04022
	Extraction Reagent	1 x EUM04023
	Internal Standard	1 x EUM04031
	<b>Separately available components</b>	
EUM04011	Mobile Phase A	800 ml
EUM04012	Mobile Phase B	600 ml
EUM04021	Washing Reagent	850 ml
EUM04022	Reconditioning Reagent	850 ml
EUM04023	Extraction Reagent	60 ml
EUM04031	Internal Standard	1.1 ml
	<b>Accessory</b>	
EUM00C04	Analytical Column with test chromatogram	1 pc
EUM00A17	Precolumns	2 pcs
EUM00A18	Holder (incl. 1 precolumn)	1 pc
EUM20071	FloTuning ETG	2 ml
EUM04051	Control Set for Ethylglucuronide in Hairs, lyoph. (2 levels)	3x2x0.2 ml
EUM04041	Calibrator Set for Ethylglucuronide in Hairs, lyoph. (6 levels)	3x6x0.2 ml